

ON ARCHITECTURAL EDUCATION.

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I HAVE been invited to address you this evening on the subject of architectural education. It is one that has long engaged the attention of all thoughtful architects. Some fifty years ago the Architectural Association set out on its task of self-improvement, and in the presence of architects I need say little of the energy and enthusiasm of those who founded the Association, and of those who have since carried on its educational work. They are well known to us all, and show that, for two generations or more, architects have felt that the methods of Pecksniff were inadequate, and that some more systematic training was necessary if the student was to be turned out properly equipped for the work of his life. I think the whole profession must gratefully recognise the pioneer work that has been done by the Architectural Association in this regard. Much has also been done elsewhere, for instance in the schools of University and King's Colleges, under Professors Simpson and Reilly at Liverpool, and Professor Capper at Manchester. But notwithstanding this increasing tendency to develop school training, and the improvements that have been made in it, the pupilage system has in the main held the field. No sustained, or so far successful, attempt has been made to bring it into relation with the schools, and to co-ordinate the various methods of training in use in the latter.

With the merits and defects of the old-fashioned method of pupilage we are all more or less familiar. Its merits are that the pupil sees actual work in preparation; that he has the opportunity of noting how far theory has to be modified in practice, and of learning how the business of building operations is actually conducted, so far as the architect is concerned. Moreover, he has the advantage of the personal guidance of his master, a somewhat variable quantity by the necessity of the case. The weak points of the pupilage system are that it tends to become a "go-as-you-please" affair; that is, that it leaves large gaps in the student's knowledge which he has to make up afterwards as best he can; that the student seldom, if ever, gets any glimpse of the theory and principles of architecture; and lastly that, through want of preliminary training, the pupil does not learn half what he might during his term, unless he is exceptionally intelligent. For the first year or two, all he can do is to learn the use of his instruments and the ordinary methods of preparing working drawings. In the earlier part of his time he is working in the dark, realising imperfectly the meaning of the lines which he laboriously traces; indeed, pupils have been known to go through their whole three years without grasping the fact that it is a matter of practical moment whether a wall plate is drawn $4\frac{1}{2}'' \times 3''$ or $9'' \times 6''$. I fancy a good many of us in our early days of

practice must have been rather aghast when brought face to face with the results of our drawings and specifications in actual brick-and-mortar. It might, indeed, be a useful exercise (if, perhaps, a somewhat uncharitable one) for a teacher to take his students through the streets of any big city and point out the remarkable results in building of this lack of concrete imagination, this ignorance in the designer of the terrible things he is asking of his builder and inflicting on his client. The cause is insufficient training. A pupil in an architect's office has, to a large extent, to pick up what he can; and as he is only there for a limited time, it is highly important that before entering the office he should at least have qualified himself to learn; in other words, should have gone through such preliminary training in the schools as will enable him to get his bearings in the office without waste of time. We have, therefore, to consider how we are to start the student in his course of architectural training, what subjects he should study, and how they should be taught; and the more closely we consider this question the wider it appears. It is one that must be dealt with comprehensively, not in a hand-to-mouth manner, but on a logical and consecutive system. And though I do not wish to waste your time with remote speculations, it is evident that to arrive at clear ideas in this matter we must start from a principle; we must define what we want in an architect, and we shall then be in a better position to consider the best methods of training our man.

Looking back on the history of our calling one finds that for the last hundred years or so there has been considerable difference of opinion as to the function of the architect in civilised society. Before that date, at any rate from the days of the Renaissance till about the end of the eighteenth century, it was generally understood that an architect was an expert in building, and that whatever else he might know or do there was no questioning his knowledge of construction. More than that, a cursory study of the work of such men as Blondel in France or Ware in England will place it beyond doubt that their training in this regard was as thorough as it was possible to make it. Moreover, architecture was still considered to be one of the learned, or perhaps one should say intellectual, professions, and an architect was expected to be at least up to the average of other professions in intelligence and general culture. The latter part of the eighteenth and most of the nineteenth century, in England, saw a large incursion of the amateur into the domain of architecture—so large indeed that, to a great extent, the direction of public intelligence in architecture passed out of the hands of architects into those of the literary amateur. Questions of taste and style in the narrow technical sense were hotly debated; the side issues of architecture, archæology, ecclesiology, and other meritorious but in this case irrelevant studies, obscured the essential purpose and province of architecture, the study of applied form. Details of ornament were sought and analysed in preference to the plan and construction of buildings, and indeed the orders themselves have not weighed more dismally on the young imagination than the catalogues of Gothic tracery and mouldings, and the superficial classifications of its periods. Finally the architect drifted more and more into the position of a learned ornamentalist. He has drifted into a great many other curious positions as well—chiefly of the business order, about which I need not trouble you—but thoughtful men have for some time past been dissatisfied with the popular conception of architecture, with the constant shifting backwards and forwards of architectural taste, which can only lead to the ultimate supersession of the architect by the engineer on the one hand and by the commercial decorator on the other.

Indeed, in an art such as architecture, so long as attention is concentrated on accidents of style, on the mere external clothing of an organic idea instead of on the idea itself, there is no reason why fashion should not succeed fashion indefinitely; there is nothing to prevent a constant eruption of efforts in *l'art nouveau*. Architects have begun to recognise the meaning

and necessity of the familiar phrase that construction is the basis of architecture; to put it in other words, that if, as is the case, architecture is the art that translates construction into beautiful forms, the architect must master the principles and methods of construction before he is in any position to translate them at all. The architect is the artist of abstract form in building. Ornament may or may not come into his scheme. If it does, it is as part of the expression of a larger idea towards which he would invite the co-operation of his colleagues, the painter and sculptor. The architect for his part will contribute the idea that binds together the whole composition, he will study as an artist the selection and combination of such methods of building as not only meet the practical conditions, but also make the most of the æsthetic effects to be obtained by mass and proportion, light and shade; what a modern critic suggestively calls "space composition." Such generally is, I think, the view of the architect's province, which is slowly emerging from the tangle of the nineteenth century. I need hardly point out that in a modern architect a great deal of knowledge and experience in other matters is required as well, but the point at which I am now driving is that the real technique of an architect consists of the mastery of building processes, these are the means by which he has to produce his effects; they are, in fact, the true vehicle for the expression of his imagination. To put the point in another way, the architect thinks in terms of masonry or brickwork, steel or iron work, building processes and materials generally, much as a sculptor or a painter thinks in terms of modelled form, or line and colour.

Besides this, there is another highly important aspect of the matter which we as a profession cannot afford to overlook, and that is the possibilities of new methods of construction. The days of architecture, limited to materials mentioned in the Old Testament, are past for ever. Steel and iron render possible feats of construction which on economic grounds alone are irresistible, and it is our business, as artists of form, to study this steel and iron work in order that out of its practical use we may develop methods of construction which have a beauty of their own in their adaptation of means to ends. Our training ought to enable us to take this matter up where the engineers are compelled to leave it through want of training in form, and lack of artistic imagination. In a remarkable Paper recently read by Mr. T. G. Jackson at the Society of Arts great stress was laid on the necessity of architects grappling with new conditions and methods of construction. The architect of the future will not be able to ignore these matters. He will not be content to leave them to the engineer-draughtsman, able and useful man though he is, or to allow his design to be cramped by his own ignorance and the limitations of another man's mind. He must know for himself exactly what he is doing with his building if the flights of his imagination are not to land him in ambitious failure on the one hand, or in the old familiar ruck on the other.

I must apologise for this roundabout way of approaching the question of education; but the ideal which we form of an architect is a necessary premiss to any theory of his training. Keeping in view the ideal which I have endeavoured to indicate, we have now to consider what method is best adapted for its realisation. The question has been, and will be, answered in many different ways. In my student days it was supposed to be a matter of mouldings. Some have said it is all to be done by drawing, others by qualifying as a handicraftsman; and some brave spirits have cut the knot by asserting boldly that the architect is a superfluous person, and has no *raison d'être* in a properly constituted society. Into these highly interesting speculations I do not propose to enter. We are here as business men to discuss the best practical methods of training our students. The matter has, as you know, been for some time under the consideration of the Board of Architectural Education, and I hope to indicate to you the general conclusions arrived at by the Board. A word or two of history is necessary for those who have not followed the recent developments of the question.

I have already referred to a widespread feeling among architects that architectural education is in an unsatisfactory state; and in saying this I do not for a moment cast any reflection on the able men who are engaged in architectural education in London and in the provinces. They are not responsible for the systems which they found, and in several cases have made strenuous efforts to reorganise them; but the time has come for a united effort, and they will, I am sure, not merely pardon, but sympathise with, a statement of those points which they themselves will probably most heartily wish to have reformed.

On the one hand, no recognised relationship had been established between training in the schools and training in architects' offices; and on the other hand, it has been felt that the training given in the schools leaves something to be desired. In the first place the ordinary syllabus, with its plethoric list of text-books, has attempted both too much and too little. Those who, some years back, drew up the list of subjects generally prescribed do not seem to have been clear in their own minds whether they were to give the student a sort of general education or whether they were to limit their efforts to technical instruction. The result was that an imposing list of subjects was prepared, the mere enumeration of which was enough to daunt any but the most resolute student, and even he could not by any possibility master them all. The time allowed for a student's training is little enough as it is, and it becomes a matter of necessity to throw overboard all superfluous baggage. Another point requiring amendment has been the insufficiency of practical demonstration; a point of the first importance in an art such as architecture, which deals with actual shapes and solid bodies. London has been behindhand in this matter. The models scantily provided in its architectural schools have been as a rule models of ornament, caps, spandrels, carving, and the like, not models of buildings and parts of buildings, or scale models of various methods of construction in different materials. Probably the most unprofitable place in which a student could have wasted his time was the old Architectural Museum, now happily converted into the schools of the Architectural Association. Here the student—I am drawing upon the somewhat uncertain memory of twenty years ago—might find models of half the famous Gothic capitals of England hung up to nails on the wall. I ask any practical architect, how could he be expected to learn anything whatever of architecture from this congeries of fragments divorced from their natural setting? He might as well be expected to construct a picture of a tree he had never seen from a leaf pinned to a wall. The whole idea of such a museum was the faithful reflex of the amateur preciousness that controlled English architecture thirty to forty years ago. The amateur was on safe ground with ornament. He could see it, he could draw it, he could talk about it; but when it came to construction he felt himself in deep water, and therefore usually eliminated the art of building from his conception of architecture. Such questions as how and why a building stood up at all were a matter for the engineer, not for such a sensitive and emotional creature as the artist of the literary imagination.

The kind of museum of models that is wanted, and that should be attached to each school, is something pre-eminently practical; it is one that should enable the student to visualise what he is studying; it should supply the apparatus for that most important branch of study, practical workshop demonstration. The difficulty, of course, has been that such an equipment has been beyond the resources of individual schools; and this brings us to a third defect in the existing system, namely, that no attempt has yet been made to co-ordinate the various training institutions; they have, to a large extent, missed fire by going off singly. Much effort is inevitably wasted by this isolation—I will not call it rivalry. If the different schools attached themselves to one system, and worked hand in hand, it is evident that they would have larger resources to draw on; parents and guardians would have one well-understood method of training before them, instead of half a dozen; and the risk of failure which attaches to

individual effort would be minimised. Without going further into detail I should summarise the chief defects of the present system of schools as (1) faults of syllabus; (2) faults of teaching method; (3) the absence of co-ordination, resulting in waste of resources and loss of driving power.

In the early months of 1903 some informal conferences of architects were held to discuss the situation. It was found that there was much greater agreement between men of varying schools of thought than had been anticipated; and finally, at the invitation of the Royal Institute of British Architects, a Board of Architectural Education was formed to consider the whole matter. The members of this Board stated their opinions in writing on the main points at issue, and the conclusions arrived at were embodied in a report which, together with a syllabus, has been provisionally adopted by the Board. These conclusions dealt with five points, viz.—

1. Preliminary education.
2. The length of the proposed course.
3. The syllabus of training.
4. The laboratory or workshop for training in practical work.
5. The steps to be taken to initiate and administer the scheme.

The first question is that of preliminary education. It is a difficult matter to assess the exact amount of general education necessary to an intending student of architecture. From one point of view the more he has, the better; from another it is a fact that an intending student may have great natural aptitude for architecture, but little aptitude for, or at any rate little opportunity of acquiring the knowledge usually given by a good general education. It would be very undesirable to exclude such a student from the course. It has therefore been considered best not to impose any preliminary test, but to leave it to the individual training institutions themselves to lay down the amount of preliminary education which they severally consider desirable. The Board, however, consider that evidence should be shown of some capacity in drawing, both geometrical and freehand. An intending student, who is all thumbs and fingers when he tries to draw, is better warned off at the start, for it is improbable that a boy who has absolutely no power of expression at the end of his fingers will be able to get his ideas out on to paper; and though draughtsmanship is not architecture, yet some faculty of drawing is evidence of some possible artistic instinct.

2. The length of the proposed course is a somewhat difficult question. The usual three years is clearly insufficient. In the old days it used to be five, when the young architect did not have to cover half the ground he does now. Yet it would probably be difficult to revive the five years' system, and accordingly four years is recommended as a minimum. Of this time it is suggested that the first two years should be spent in the schools, the last two in an architect's office. The object of this is twofold: first, to enable the student to master his rudiments in the schools, in order that when he enters the architect's office he may know how to learn, and get the full advantage of his opportunities in the office; secondly, that in view of the pupil being partially trained, and therefore of some little use, architects may be disposed to take pupils at a lower premium, and parents and guardians may not be put to greater expense than they are under the present pupilage system. A point of much importance is that the pupil should continue his studies in the schools during his term in an architect's office. The preliminary course must of necessity be rudimentary, and should be supplemented by more advanced studies under his old teachers during his last two years. The advantage of this will be that his studies will be pursued on a consecutive system, and under competent supervision from first to last. In order to provide the necessary sanction it is suggested that, on the completion of the course, a certificate should be granted to the

student in consideration of satisfactory progress and capacity as proved by his work in the schools attested by his teachers, and by a study of some architectural project to include working drawings and specifications, and an analytical account of the nature and intention of the project. This study would be on the lines of the thesis submitted for degrees in certain University courses. The certificate would be endorsed by the architect with whom the student had served his time. I should point out that the exact apportionment of time as between the office and the school is still under the consideration of the Board. It has been suggested that the course should be arranged on a sandwich system—say, for instance, six months in the schools, followed by six months in the office, and so on. This arrangement might possibly be more convenient for the schools than for the architect's office, and the matter is one which calls for an expression of opinion from practising architects.

3. The third point is the syllabus. I have pointed out above the loss in prestige and resources caused by the isolation of the various schools, and the necessity of co-ordinating the different systems of training. The first step towards this would be the adoption by the schools of a common syllabus. In drawing up this syllabus the Board have been guided by the following considerations: (1) that it should be thoroughly practical, that is, lay the main stress on the teaching of construction as the basis of architecture; (2) that it should not attempt too much, that is, that it should not overload the student with a vast array of subjects, but should cut down those subjects to the essential and irreducible minimum, and insist on the student obtaining a thorough mastery of them as far as he goes. The syllabus proposed rests on the general principle that construction is the basis of architecture, and the correlative principle that architecture is the interpretation of construction into forms of æsthetic value. There are, of course, certain phases of architecture, such, for instance, as the design of a triumphal arch, in which construction and its interpretation are not the only motive; but for the purposes of the introductory training, which is all that the schools can offer, the principle just stated seems to be the best practical basis. The object of the training is to familiarise the student with the actual facts of building, to teach him to visualise them in his imagination, and to use his brains in their treatment. He must learn so much applied science as is necessary for this purpose, and so much drawing of all kinds as will enable him to make his ideas intelligible both to himself and to others. His exercises in design will be concentrated on plan and construction, rather than on façades and frontispieces, and his readings in history will be undertaken to furnish his mind with clues and analogies drawn from the solution of constructional problems in the past. The teaching of design and history has always been rather a burning question, and in preparing their syllabus the Board have aimed at establishing a definite point of view from which alone it should be undertaken. There is always a danger of the student's attention wandering off from hard thought into copy. It is so much easier to copy than to think, that there is a constant tendency to drop to the lower level—a tendency which is encouraged by dwelling too much on the distinctive features of historical styles. History and design should be considered as illustrative of the study of construction. In design, for example, the student should be taught to aim at the best practical use of his materials, and at the best abstract form without, at any rate at first, attempting ornament; and he should be systematically discouraged from literal copy of known examples. The teaching of history, again, may be dangerous if it induces in the student an archæological instead of an inventive habit of mind. The archæological method of teaching history is to say that a building was built in such and such a year, and that by reason of its mouldings it belongs to the First Pointed, or any other style, and *there it leaves the subject*. This method has its value in the proper place, but not in the preliminary training of the schools. What one wants of the lecturer is that he should explain

how and why the building took the form it did, why it was covered in in one way and not in another, how it rose as an organic structure conditioned by the uses to which it was to be put, the materials of which it was built, the knowledge and skill of handicraft possessed by its builders.

I admit that this is a difficult thing to do. Yet the attempt is being made by the ablest of our teachers, and, in my opinion, it is only in this way that the study of history will be useful in the schools. In no other way will the student learn that architecture is a real and living art, and has been so since the days of the Egyptians—since, indeed, there has been any architecture at all.

The same practical considerations should control the teaching of drawing. The object of architectural training is not to turn out a draughtsman—and there can be little doubt that in recent years mere draughtsmanship has occupied much too prominent a place in the general conception of architecture. On the other hand, it is important that the student and the architect should not be hampered in their studies by incapacity to translate their ideas into line; indeed, it has often seemed to me that some of the faults we freely criticise in each other's work are partly due to imperfect powers of drawing, and by this I mean insensibility to fine line, and a certain blundering clumsiness of the artistic sense. An architect ought to be able to get out on paper whatever he wants; but when he has done that, he has done all that he has to do as an architect. As to the marvels of skiagraphy and perspective, the exquisite brushwork, the magnificent audacities in sky and tree with which the Continental draughtsman fascinates the public, the architect should have none of them. To what we may call the architectural mind a few pen-and-ink scratches by Peruzzi are more suggestive than the most elaborate effort of some winner of the Prix de Rome.

By following this method of elimination the syllabus reduces itself to a modest list of five subjects.

- (1) Building materials.
- (2) Construction, including (a) applied mechanics, strictly in practical relation to construction, and (b) the practical methods of the building trades.
- (3) Architectural drawing, including working and freehand drawing, solid geometry, and measured drawings of historical examples of architecture.
- (4) Geometrical projection and rudimentary perspective, this latter to be studied as an aid to the shaping and modelling of buildings, not as a means of elaborating architectural drawings.
- (5) Design and the history of architecture as supplemental to and elucidatory of the study of construction.

The above subjects would be taught by class work in the schools and by demonstration in the laboratory or lecture theatre of practical work.

These five subjects would be studied in the schools during the two years' preliminary or introductory course. The advanced course, which would follow on, would include the further study of materials and construction, design, history, and architectural drawing, with some rudimentary instruction in modelling. "In putting forth the syllabus" (I am now quoting the Report) "the Board desires to point out that its object is to lay a sound foundation on which the student can continue his training in later years. It cannot contemplate the full equipment of an architect as possible in a four years' course."

The laboratory or practical workshop which formed the fourth of the subjects considered by the Board is an essential feature of the scheme. The practice has always prevailed of sending pupils on to buildings in course of erection, to pick up what practical hints they can; but the results have not entirely answered expectations. The pupil wanders about, gazing vaguely at scaffold poles and girders; the foreman is too busy to attend to him, or may have

no power of explanation ; and for want of proper guidance the pupil's visit is apt to end in a relapse into temporary mental paralysis and a cigarette. Such work must be done under systematic direction if it is to benefit the student ; and though one would certainly retain the practice as a valuable auxiliary training, the best solution seems to be the establishment of workshops for practical demonstration in the building trades by competent men. The demonstration given in the laboratory would be in intimate relations with the lectures given in the classrooms of the schools, and the course would be arranged so that the training in the classrooms and in the workshops should proceed together. In order to avoid misconception I may say at once that there is no idea of using these workshops for the purpose of turning the student into a skilled plumber, or mason, or whatever the trade may be. The object is to enable him to see with his own eyes, and if necessary handle with his own hands, the various materials and processes employed, in order that when he comes to direct these processes himself in after years he may have actual knowledge and realisation of what he is doing. Engineering students have to practise actual handiwork ; architectural students are not less concerned with construction, and there is no reason why they should not master it as thoroughly as the young engineer. I cannot help thinking that there is a bit too much of the dilettante and the fine gentleman about the modern young architect. He would do better if he would take off that elegant frock-coat and go to work in his shirt-sleeves. Indeed, the profound scepticism of the public in regard to architectural capacity as compared with engineering is not likely to be removed until we have dealt with this radical fault in our training.

We now come to the last of the five points dealt with by the Board, viz. the steps to be taken to initiate and administer the scheme. These must to some extent be tentative at first. The scheme can only get under weigh by the goodwill and co-operation of the various educational bodies concerned, and it is proposed to submit the scheme and its syllabus to recognised architectural training institutions and to invite them to adopt it. The establishment of a laboratory or workshop in connection with each separate school would be impracticable for financial reasons. Where engineering schools exist side by side with architectural schools, as in some of the modern universities, the student should certainly avail himself, as far as is possible, of the training there given ; but, generally speaking, it is proposed to invite the county councils to place their technical workshops at the disposal of recognised training institutions for purposes of practical demonstration.

It will be evident from this proposal that the adoption of a uniform method with a view to the co-ordination of the various training institutions which are at present working in isolation throughout the country is a cardinal feature of the scheme. A word of explanation is necessary in regard to the word "uniform." In recommending the adoption of a uniform system and syllabus the object the Board has in view is to reinforce education, to enlarge its opportunities by bringing the schools into touch with one another, so that, for example, their united resources may admit of lectures and demonstrations on a level beyond their attainment individually. The last thing the Board has in view is the establishment of a rigid and inelastic method of training. Uniform does not mean permanent. There is a dangerous tendency in all systems however excellent to ossify, as one may say—to stereotype their methods in a manner that is ultimately hostile to all progress. This tendency has to be carefully watched and resisted. Nothing could be more fatal to the course of true education than an attempt to tie down a system of architectural training to the Procrustean bed of statutory definition. The Board is at one with all educationists in urging that our method should be largely tentative, sympathetic, and sensitive. This is peculiarly necessary in such a case as that of modern architecture, where we have lost our old traditions, and have yet to build up a new one. The term "uniform," therefore, is to be understood as aimed, not

at the establishment of a fixed and cast-iron system, but at the co-operation of the schools in a scheme adopted by them all. One cannot be too grateful to those bodies, such as the Architectural Association, which have paved the way for sounder training by their individual efforts; but the time has now come to draw these efforts together, and to put an end to the waste of energy which results from their lack of union. With this object in view it is proposed that the Board of Architectural Education should act as a central advisory body to the several schools, with power to direct the administration of the scheme by means of visitors who would report to the Board on the work done in the schools. A Board with such powers is necessary to initiate and administer such a scheme as is proposed; and though the future constitution of the Board has not yet been determined, there can be no doubt that the aim will be to make it as representative as possible of the profession generally. For it is only by the co-operation of the entire profession that this scheme of architectural education can be made effective.

It is with this object that I have endeavoured to-night to put before you a clear account of the progress of the scheme up to the present date. There is nothing revolutionary in these proposals. The object of the Board throughout has been to avail itself of all that is sound (and there is a great deal that is sound) in existing methods, and to develop and co-ordinate existing systems on such lines as will get the best out of them for the practical training of architectural students. It is time that the profession pulled itself together, and here is the opportunity for doing so. Complaints are common—and I fear well-founded—that the profession does not meet with the recognition it deserves. Nobody seems quite certain what sort of creature an architect is, or what sort of position he claims for himself. In the provinces, more particularly, the auctioneer and house agent, the decorator and upholsterer, indeed, one is tempted to say the failures of other trades, compete with him and supplant him, and desperate remedies are proposed for this state of things; but I maintain that we have only ourselves to thank. The profession, as a whole, appears to have lost touch of the essential purpose of architecture; it has not kept abreast of modern construction; it has ignored the fact that architecture is both a science and an art; it has allowed its standard of knowledge and capacity to fall below the proper level. It is because the average of attainments amongst us is not what it should be that the mere adventurer is able to step in, assert that he is just as good a man as the architect and much cheaper, and get the public to believe him. I need hardly say he is nothing of the sort, nothing but a fraud and an imposture; but it is the public who have to be convinced of this.

The remedy is in our own hands, and it is to put our house in order, to prove by visible evidence throughout the country that the practice of architecture is an affair of real skill and solid knowledge; that the architect from his point of view is an expert in building, every bit as much as the engineer is from his. When the public realise that to spend their money on building to the best advantage they must go to the architect as the man who really knows his trade, they will readily accord us the recognition due to men of special knowledge and admitted ability in their own calling. The first step to this desirable end is to see to the training that we provide for our students, and to ensure that they, at any rate, shall master the technique of the great art of building. So, and I believe only so, shall we prepare the way for the return of architecture to her rightful place as the mistress of the arts.

DISCUSSION OF THE FOREGOING PAPER.

The President, Mr. JOHN BELCHER, A.R.A., in the Chair.

SIR ARTHUR RÜCKER, D.Sc., F.R.S., Principal of the University of London, who rose at the instance of the President, said: I feel very much complimented by your asking me to move a vote of thanks to the lecturer, both because I cannot for one moment pretend to have any expert, and I am afraid very little dilettante, knowledge of your art, and also because I certainly hoped I should have followed gentlemen who would have been able to speak much more to the point than I can hope to do. But I take it as a great compliment to the University of London and myself that I should be asked to propose this vote of thanks, and I do so with the greatest possible pleasure. In the first place, there is one point on which I feel very strongly, and about which I should like to say a word or two. I have all my life been a devotee of pure science. I have seldom been set to do any practical job in the sense in which you gentlemen here would regard a job as practical; but, nevertheless, I do not think that any man in the room feels more strongly than I do that if the great movement which is now taking place in technical education is to have a sound foundation, if it is ever to reach the heights which we hope it will attain, it is absolutely necessary that it should be carried out by—at the very least in conjunction with, and I should prefer by—those who are themselves professional members of the great professions and trades, the technical education of which is to be improved. It is perfectly absurd to suppose that men whose lives have chiefly been spent in dealing with things from a theoretical point of view should set themselves up to dictate to those whose whole lives have been spent in dealing with the matter from a practical point of view. It is only if engineers, architects, and shipbuilders will themselves take an interest in the education of the professions of which they are representatives that the Universities and Schools can hope to be of use in aiding them to carry the movement to a successful termination. It is, therefore, with the greatest possible delight that I see a great profession, the leading members of which are gathered here this evening, taking up the whole question of education in architecture from a practical point of view. The ultimate success of any such scheme must depend upon you, and you alone; and if the organised educational bodies can give you any help in the matter I hope you will understand that we do not in any way attempt to dictate, but that we look upon it as an honour to be asked to help a great profession if our knowledge of teaching and of science can be

of any use. May I, however, say that I for one regard it as a matter of importance that the Universities (and for the moment I will speak only of the Universities in great centres of population) should not stand aside and merely look on while these movements are going on all around us? There is, I know, an idea abroad that a University is a body which regards itself with the utmost complacency, and is prepared to lay down rules and regulations for the instruction of everybody in everything. I hope that what I have already said will show you that there are some amongst us at all events who do not accept that definition; because, on the other hand, I should like you to remember that, after all, it is a matter of importance that young men of different professions, young men aiming at different rôles in life, should, as far as possible and within reasonable limits, be brought up side by side. It is not a good thing that the members of any individual profession should become a mere caste—that they should be educated from the first apart from all others who are interested, or likely to be interested, in other things. As an Oxford man, I may say that a great part of the good we obtained in those old days in Oxford was gathered, not merely in the class-rooms or from the beautiful surroundings of the University, but from the friction between mind and mind, from the mutual converse of able undergraduates who had different aims and objects in life. Something of this sort ought to be attained in any great scheme of education; and I therefore hope that in carrying out your plans you will do what you can to place the young architect, not merely in a separate Architectural School, not merely in an architect's office, but that when possible, and where it is practicable, some part of his education shall be taken in an institution where he can mix with others who are following, or intending to follow, different professions. This, I think, can be attained, and perhaps can only be attained, by co-operation with the Universities; and I sincerely hope that the University of London in future may be able to assist in the schemes which you have been so ably drawing up, and that we may be able to carry out within our own Colleges some part of the scheme which you are now laying down. You will understand that I recognise that it is for you to say what is necessary for an architect, and that it is for us to follow; but at the same time I do think that the Universities may be able to do something, both in the way of providing a certain

substratum of education which is necessary for a man to reach the top of any profession, and also to provide the opportunity of mingling between undergraduates whose education is of different types. May I say that I heard with great pleasure what Mr. Blomfield said in his interpretation of the word "uniform"? I confess when I first came across that word I was a little doubtful what it meant. I should very much regret it if you attempted to issue a mandate to the world that all architects should be brought up on an absolutely uniform system; that the same course was to be followed in a municipal technical school and in a University, and that there was to be no possible divergence, either to the right hand or to the left; that more or less general culture was not to be included; that every detail of the course was to be mapped out as rigidly as every detail of a route of railway. This, I take it, however, is not to be the meaning, but that you will leave room for initiative; that you will leave room for reform; that you will leave room for gradually raising your system to something greater than you at present imagine. If this is so—and I gather from Mr. Blomfield that it is so—I can only say that I am most heartily with you, and that since I came into this room the last doubt left upon my mind as to the feasibility and practicability of your course has been wiped away. May I then hope, without attempting to lay down any scheme, that you will regard the University, not as a rival, but as a friend in these matters? May I hope that our own Board of Architecture may sometimes ask you to advise in the matters on which you are so competent to speak? We have been proud to have your late President, Sir Aston Webb, as the Chairman of our Board of Architecture, and I think you will agree that we have sought for inspiration at the fount. I sincerely hope that since the work of the University of London has been specially laid down to be that of co-ordinating the higher education in London, and since I am day by day, and almost night by night, spending my whole time in trying to contrive schemes by which the wastage which is so large a characteristic of London education in the past may be done away with—so that instead of doing a thing badly by two people we may get one man to do it well—I may add that whatever mechanism may bind us together, or however much we may be separate in our working, I hope you will realise that you and we are working side by side with one hope and desire, namely, to co-ordinate education; that we of the University recognise and sympathise with the desire of a great profession to make its education worthy of itself and to produce, as I understand from Mr. Blomfield, a new epoch in the history of architecture in this country, in which it shall cease to be the mere student of what I may call, without offence, dead forms, and become a profession more

firmly founded than heretofore on the great root principles of construction.

SIR ASTON WEBB, R.A., *Past President*, in seconding the vote of thanks, said he did not propose to say anything that evening on the subject brought before them, partly because he found himself entirely in agreement with Mr. Blomfield. It had been his good fortune for some time to work with Mr. Blomfield upon this matter, and he was only saying what all the Board felt, that they were very much indebted to him and also to Mr. Slater, who had acted as joint honorary secretary to the Board of Architectural Education, for the enormous amount of time and ability they had devoted to this work. They would all agree that it was a very proper and a very fortunate thing that at this stage they should have had Mr. Blomfield to explain to members of the Institute the position to which they had been able to bring the subject. Architectural education was a matter which architects, of whatever school of thought, might unite and work together upon for the advancement of their art. They had only one object—viz. that those who came after them might have better opportunities of acquiring knowledge in architectural matters than they themselves had had. They all felt enormously the great disadvantages under which they had carried on their work in their earlier years, and were sincerely anxious that in the future those difficulties and disadvantages should be swept away. Architecture at the present day was an art difficult enough and complex enough for anybody to undertake, and the least they could do was to try and remove the unnecessary difficulties which they themselves had experienced in their younger days. They would, he thought, be much encouraged by the kind words of Sir Arthur Rücker, and when they came to the detailed system of education would appreciate very highly the assistance he had so kindly foreshadowed of the London University. As Mr. Blomfield had said, they were attempting no cast-iron scheme. They should probably find, if the scheme were carried out, that it was capable of improvement, and therefore it was laid down as a tentative scheme which could be modified as experience required. He seconded most cordially the vote of thanks. He was in a position to know perhaps more than most how very much their thanks were due both to Mr. Blomfield and to Mr. Slater, and especially on that occasion to Mr. Blomfield for the excellent *résumé* of the work which he had brought before them.

MR. H. HEATHCOTE STATHAM [F.] said he was so very much in agreement with Mr. Blomfield's Paper—he was happy to say more in agreement with it than he quite expected to be—that there was not so much to say in the way of discussion. But there were one or two points on which he should like to make a remark in regard to what he or some other gentleman partially

referred to as the doubtful way in which architects were regarded in this country. He was not sure that that was not as much the fault of the public as of the architects. This was an unæsthetic country, and one could not get people to understand what the art of architecture was. In France they understood it much better, and the fact that a man was an architect in France was a reason for respecting him; in England it was a reason for being puzzled about him. The tone Mr. Blomfield had taken in speaking upon the importance of a practical basis of architecture in England was very much wanted at present, and he hoped that what he had said would have its effect. He was a little sorry to hear something like a slur cast upon the French architectural system in the Prix de Rome. He understood of course what was meant; Mr. Blomfield thought that they attached far too much importance to magnificent drawings; and no doubt they did. But there was this to be said for the French system, it did keep before students what one might call the intellectual ambition and the intellectual side of architecture most strongly; and if too much attention were paid to mere details of construction, might there not be the same danger as that of paying too much attention to mere details of ornament? Both views were incomplete. The fine thing about the French system was that they appeared to be taught to consider plan and design as going together; that a building was a conception of which the plan was as important as the exterior appearance or detail. What was it that made the interest and the beauty of that remarkable building called the Petit Palais in the Champs-Élysées? The detail of the front was very fine, the sculpture was very fine; but it was not that merely; it was the fact that the whole conception of the building was a new and an original one; it was unlike any other building. It was the plan and treatment taken together that made it so interesting and beautiful. And that was what, it seemed to him, the French were brought up to think of very much, and what he thought was really the most important way in which to regard architecture—not to exaggerate the importance of architectural ornament and detail on the one side, and not to exaggerate mere construction on the other; but to regard the evolution of a great idea in plan and design as the object to be kept before them. Of course one could not help being struck with the contrast—he was rather afraid of saying this before so many Royal Academicians in the room—in the way in which in the Paris Salon one saw the plans of every building in the architectural section, of large size, of the same scale as the elevations; whereas in the Architectural Room in the Academy very little was to be seen of plans. Of course there was very much less space, but still plans were not encouraged as they should be, and he had known people actually send in per-

spectives without a plan, because they thought that a plan would spoil its chance; that is to say, that it would make the drawing not so attractive. He must say that he should like to see at the Royal Academy greater importance given to plans in the annual exhibitions, and that the addition of a plan ought, in fact, to be a *sine quâ non*. That was so with the French, and he thought they were right. He joined most heartily in supporting the vote of thanks for what he thought was a most interesting and practical Paper.

PROFESSOR F. M. SIMPSON [F.] said he felt thoroughly in accord with the scheme outlined by Mr. Blomfield in his Paper. There was one little point he might perhaps be allowed to refer to. Mr. Blomfield stated that no attempt had been made to bring the pupilage system and schools into relation. He could not, of course, speak for a certainty of all schools in England, but he fancied that more had been done in that way than Mr. Blomfield implied. In Liverpool an attempt had been made, and it had worked satisfactorily. When he went there, over ten years ago, and started the School of Architecture at University College, at a meeting of the leading architects of the town, the course of education—which was a two years' course—was approved of, and a resolution was unanimously passed agreeing to reduce the premium and term of years to students who had passed through the College course and obtained the College certificate. He was pleased to bear testimony to the fact that that resolution was adhered to most loyally and generously all the time he was in Liverpool. More than that, following on the two years' course, there were two evening classes which the students who had passed through the course attended to a very great extent, and at these two classes some of the leading architects of the town acted as visitors. So that he thought he might claim that there, at least, the pupilage system and the course in the school were brought into direct relation with each other. He might perhaps mention the way that it worked as regards the years in the office after passing through the course. Students generally were articulated for two years, and the premium was reduced, sometimes a half, sometimes more than a half, sometimes not quite so much, according to the ability of each student. He was very glad indeed to hear Mr. Blomfield lay such stress on the necessity for museums of models. There could be no doubt that they were extremely valuable. One of the great difficulties, however, that they had to deal with in getting together a museum of models was the difficulty of obtaining the models. Of course one could have them specially made, but that took time and was expensive. He only knew of one firm in England that made models of construction. If Mr. Blomfield could tell him of any others he should be very much obliged. At present, so far as he knew,

they had to rely entirely on that one firm and on models made specially. In France it was easier to obtain them, and Messrs. Collon had a most remarkable collection; but, as he had found from experience lately, it was rather difficult to choose models from photographs, and it was not always convenient to pay a visit to Paris on purpose to purchase a few models. He thought they were all very much indebted to Mr. Blomfield for the absolutely clear and concise way in which he had put forward the scheme for which he had done so much during the past twelve months, and he had much pleasure in supporting the vote of thanks.

MR. T. G. JACKSON, R.A., said he had listened with the greatest pleasure to Mr. Blomfield's address. He thought he was right in saying that Mr. Blomfield was the father of the scheme, and it owed very much to him that it had arrived at its present state of completion. That there was room for improvement nobody could doubt. If they looked back at the history of architecture, one must admit that, till the middle of the last century, there never was a time when, out of ten buildings put up, one could be so sure that nine of them would probably be bad; there never was a time when there was such a large proportion of work that was inartistic, and he might almost say bad. There was indeed a great deal of that still going on. They had a great deal of showy commercial architecture which disgraced their streets—architecture in which it might be thought that the only idea the designer had of art was that it consisted in ornament. The question was how to make this better. He thought one might say that amongst our rising architects there never was a time perhaps when there was more promise. One noticed in their work the growth of a feeling of restraint, of sober and reasonable design, very different from the kind of work he had just alluded to. Therefore their aim must be to bring the whole class of architects, so far as they could, to the same style as that to which they looked forward from those who were the hope of the profession in future. The keynote of the scheme that Mr. Blomfield had enunciated was that architecture should be based upon constructive principles. After all that was merely saying that architecture was not a matter of fancy, of imagination, of caprice; but that it was founded upon reason, upon common sense; that the development of architecture in the past, if they traced it out scientifically and with the true historical spirit, would be found to have arisen almost entirely in the first place from suggestions of construction, from difficulties of construction, from difficulties of material and appliances, which had been in fact the most powerful means of inspiration to the architect; that the true artistic spirit seized upon these difficulties and suggestions, and from them it produced the finest productions of art. What they aimed at was to bring back the study of architecture to that view.

That being the keynote of their plan, the point was, how were they to apply it? He was glad to see that there was to be no strict test for admission to their course of studies. The great thing was to sweep up into the proper teaching all those, whoever they were, upon whom they had to rely for their buildings; and for ordinary buildings it was well known that architects, as a rule, were not employed—perhaps nine buildings out of ten were done without an architect. Were they to be content to leave them to mere chance, or were they to do something to try and raise the level of architecture all round? He trusted this scheme would be as useful to builders and engineers as to those who were more strictly speaking architects. For large and important buildings architects were of course indispensable; but for the ordinary domestic architecture that rose around them, for the development of building estates, and so on, it was inevitable that, as a rule, it would be done, not by professional architects, but by people who were architects in a fashion—because everybody who designed a building, who erected a building, was an architect—but they would not be done by those whom one might call professional architects. He thought it must be so. He remembered a case where one of the Colleges at Cambridge, having some land to develop, thought they would exercise an artistic influence upon the designs, and they employed an architect to design the kind of house they would like to be put upon it. Then they offered it in the market for builders to come and take sites for building. Not a builder moved. They waited a long time, and their land did not go off. Then they relaxed this restriction, and allowed the man who took the ground to design his building under certain conditions of approval; and the land went off directly, and was covered with buildings in a short time. That only showed what must be the case; and it was for them to do something to remedy that state of things. Those men, if they had been taught some of the common elementary principles of architecture, would have done better things than they were in the habit of doing. He was delighted therefore to think that there would be no test which would restrain anybody from coming in and improving himself in the way they hoped to improve him. He was delighted to hear what Sir Arthur Rücker had said as to the syllabus, that it would be a mistake to make it too rigid. The syllabus should be of the nature of suggestions to different schools. He should be sorry to see any school tied down to go through a definite system of instruction; they must allow for the peculiarities of different places. Some teachers had a great facility for teaching in a certain way, and they might be hampered by the strict rules of a syllabus to which they would be obliged to conform. He would allow great latitude. The syllabus would be immensely useful if it

suggested the lines on which architecture might usefully be taught, but it ought not to tie the teacher or pupil down absolutely to one particular curriculum. At South Kensington the Council for Art had been lately producing a syllabus which they were sending out all round the country to every school; but it took the form of a suggestion, and different art schools were left a certain latitude. Of course they wanted more latitude in schools where one particular craft was to be taught; architecture, for instance. But this syllabus they hoped would be useful, and would give the right direction and the right principles on which they thought art ought to be taught; and in that way it would be more useful than if it were a rigid rule to which all were obliged to conform. Then there was the question of visitors. Part of the scheme which they had been elaborating at South Kensington for the different art schools throughout the country consisted in this, that they hoped they should be able to have visitors who would go round and help the masters with suggestions, and so on. He did not know whether it would be possible for our scheme to be brought in any way in relation with that. There would be amongst the visitors, if they succeeded in getting the Government to approve of what they had suggested, some who would be architects, to go and look after the architectural teaching in the different art schools throughout the country; and it was quite possible that we might put ourselves in some way in relation to that which would be very helpful, and might, perhaps, avoid some clashing of two different systems. The workshops were, of course, a difficulty. Whether it would be possible to arrange with builders to let the students have the run of their workshops he did not know. To establish workshops of their own would be expensive, and only practicable in the large towns; in the more remote places it would be very difficult to give the students the same facilities. A great deal of good would be got, he thought, by their alliance with other artists; if painters and sculptors and architects could mix more together it would be an admirable thing for all of them. That every sculptor should learn a little architecture would do him a great deal of good; and were architects to look beyond their own craft to the decorative crafts, in which they were probably to be allied in the future, it would give them wider ideas; they would look beyond their own T squares and see that there were modes of decoration in which they would be glad to have the co-operation of their brother artists from the bottom; and it would be much better that they should associate with them in their respective schools. Everything, after all, depended upon the students. They might provide the best education in the world, but it depended upon the men, after all. He himself believed a great deal in the picking-up system.

The most that education could do was to make it easy for men to pick up knowledge, to put opportunities and suggestions in their way, and help them to remove difficulties. Beyond that he had not very much faith in any system of education. We may provide the fount, but it was impossible to say whether, when the wild asses come there, they will quench their thirst at it.

Mr. JOHN SLATER, B.A. [F.], said that, as perhaps, with the exception of Sir Aston Webb, he knew more than anyone else of the immense amount of time Mr. Reginald Blomfield had given to this subject, he should like to express his own thanks, and he was sure the thanks of the Meeting also, for the immense trouble he had taken on the subject. With regard to what had fallen from Mr. Statham as to the French system of education, he could not help thinking that the great drawback of the French system of education was that it stereotyped the methods of the people who followed it. He remembered someone remarking in that room that an eminent French architect on a visit to this country had inspected a number of the drawings and sketches done by young men here, and he said that with all their system of education in France they could never hope to arrive at such originality as was shown in the work he had inspected. He could not help feeling that there was a danger in any system of education of its stereotyping the system. That was a thing they should avoid, and Mr. Blomfield had fully explained that there was no uniformity in that sense that they were advocating in their scheme of education. He should like to say how very thoroughly he endorsed what fell from Sir Arthur Rücker as to the desirability of any student who intended to practise architecture having an all-round education and mixing with others—not only with those with whom he would work in after life. He felt certain that the better a man was on all sides (granting, of course, his genius and his capacity for taking pains), the better architect would he be.

Mr. MAURICE B. ADAMS [F.] said he should like to make one or two remarks, as he considered this was a very memorable occasion. During his whole connection with the Institute things never appeared to him to be so hopeful as they were at the present moment. When they got men like Mr. Blomfield and Mr. Jackson coming there to co-operate with them in this endeavour which they were making for improving the education of their craft he was sure that the future was luminous with hopefulness. When they turned to the National College of Art and saw the great improvement that had taken place in the work of the students, as was demonstrated in the recent exhibition held there, he, for one, saw reason for great hopefulness. The drawings and designs to which he referred were exhibited on the other side of the way in an iron building at the rear of the Natural

History Museum, and they made a most interesting and creditable exhibition. It was, he assumed, to the schools of art and polytechnics throughout the country that those who were alluded to by Mr. Jackson must turn for that degree of elementary instruction in the teaching of architecture which was all they could hope for. Architects, as a professional body, could not be expected to teach builders the art of architecture; they had to take a more limited view and try to train their own students as professional architects. It had been argued that professional architects were not wanted. For his own part he did not sympathise with that view, naturally so; but he did think there was a great deal in what Mr. Jackson had said. Having himself taught in a school of art many years ago, he fully recognised how deplorable the current teaching of architecture then was. But in that respect matters had very materially improved, as would be seen at the more recent of the National Competition Exhibitions which were held year by year, and he had on several occasions previously acted as an Examiner for some of the subjects in these National Competitions. It was true that a great many of those students who were most successful in the architectural department in these particular competitions were those who had competed for the prizes of the Institute and the Royal Academy, and very often the prize-winners were to be seen carrying off prizes with drawings which had already won prizes elsewhere. Whether that was altogether desirable he could not say; but he had often thought that a drawing which had gained, say, the Soane Medallion or other prizes at the Institute should be restricted from competing for the medals at South Kensington. There was no doubt, however, that the work in applied design had very greatly improved. Then, again, if they went down to Liverpool, they heard of the immense good that Professor Simpson had done there; that he had raised the whole status of architectural pupils in the town. He himself had been there recently, and had heard first-hand testimony of the great advantages to architecture that Professor Simpson's influence had brought about in that city. But what impressed him most of all was that their society, the R.I.B.A., which did not profess, and never had professed, to be a teaching body, was seriously taking up that which competition abroad was forcing upon them, that they must make themselves (whether they agreed with the French system, or the German system, or the American system, or not) more competent in the craft they professed. It was the urgent need of co-operation amongst the whole profession that he wished to emphasise, because his idea was that the majority of architects did not take that interest in this question which it was imperative they should do. They must have co-operation all over the country, or they should never succeed. If any words he could say should impress this necessity

upon the architects throughout the provinces, they would not have been in vain.

Mr. E. M. GIBBS [F.] (of Sheffield) said that he felt sure that this scheme would be most cordially received by the architects in the provinces and carefully considered by them. He might mention that he and two of his friends had thought it of sufficient interest to come up specially to hear all about it. He had had the privilege of reading an advance copy of the Paper on the way up and carefully studying it, and had been very much impressed by it. The Paper, however, was so comprehensive in its scope, while at the same time so lucid and full of detail, that it would be impossible for them to discuss it fully at that meeting. But there was one point which he thought had been overlooked, and it was so important that he hoped he might be excused for mentioning it, and that was, that in the syllabus there was no provision for elementary art training. Mr. Blomfield had said that the art of architecture is translating construction into beautiful form. One of the first things, therefore, that a young architect ought to learn was to appreciate beauty of line, form, and colour by drawing in light and shade, and by the study of colour. Elementary teaching of that kind would go well with the others, and it should, he thought, be put in as a sixth subject.

Mr. G. A. T. MIDDLETON [A.] thought they were all agreed that the scheme which had been put before them was one of very great magnitude. Perhaps one of its greatest and best features was that it was not intended to centralise all architectural training in London; its great object appeared to be to distribute it at least amongst the great provincial centres. There must, however, always be a class of students who were not even privileged in that way; many whose parents lived in small country towns, out of reach of the centres where the Architectural Schools were located, unless they were prepared to spend more money upon their sons' architectural training than they could afford. Those students would in the future, as hitherto, be articulated in offices in small country places. How were these to be reached? This was a great problem, and one which this scheme at present did not pretend to deal with; but he ventured to suggest it as a matter for future consideration, that it might well be dealt with, as the means of doing so were not difficult. He referred to teaching by correspondence. Correspondence teaching had hitherto been left in the hands of private individuals. He for one had had twenty years' experience of it, and he could assure them that it was a successful system; but it could not do, in the hands of a few private men, what it could do if it were properly organised from great centres. He should like that matter to be taken deeply and seriously into consideration as a way of teaching those who lived in out-of-the-way places, and for the continuation of the studies of

those who had their first two years, as was suggested, in the great central schools, and afterwards had to go to these less central towns.

Mr. H. C. CORLETTE [A.] said it had been a great pleasure to him to listen to Mr. Blomfield's Paper, and he hoped the future would see the scheme satisfactorily unravelled and in practical realisation. The flexibility of the syllabus would be a difficult thing to arrange; but with the support of the ability which had framed this great educational scheme, there seemed every promise that it would be most admirably dealt with. He thought that the period after the student had done his school work would be better lengthened to three years. Two years would be rather a short time for a man to pick up very much in an office, especially if he was going to spend part of that two years adding to the work he had already done in the schools. He assumed that some of that work could be done in the day and not at night, because if a man was to be at work too much at night he would not be fresh enough for creative work in the daytime. With regard to the syllabus, Mr. Blomfield mentioned the study of old buildings. It appeared to him that if the study of old buildings was undertaken a little more under direction than had been the case in the past, it might be more advantageous to students. If, for instance, a student was going to take up a certain period of architectural development (he would not call it "style"—they had done with that), would it not be advisable if he selected a particular building and made a thorough study of that building from foundation to roof—that is to say, study the reason for all the different variations of the design in its plan and its structure? And after he had thoroughly studied it, not for a few weeks only, but for a year or a couple of years, if he wrote a thesis on the subject describing its plan and construction, and something of the history of its development, that would lead him to understand the artistic and general history of the period in which the building was erected. This would add interest to his work as an artist, and it would not necessarily make him merely an archaeologist. With regard to drawing, it might be better if they, as future architects, were taught to look upon drawing, not as a thing that was an end in itself, but more as a hard craft that had to be learned as a means of explaining ideas to others; not a study of shadows and things of that sort from the painter's point of view, but as a craft, just as a sculptor studies when he works in clay. In the suggestion that the system should be uniform, he understood Mr. Blomfield to mean that in aim and in principle there should be uniformity, but that there should be great diversity of method in the teaching to be adopted in the various centres. He hoped that those centres would not be only provincial. In the case of architecture they were dealing with a question of education which must be considered as an Imperial affair, Imperial in

this sense, that they must have regard for Australia and Canada in connection with their schemes of architectural development. Especially in the case of Australia he knew that there was a great desire on the part of men out there to be more in touch with the things of art in the Old World than they were at present. In Australia they had none of the old buildings to study that we have in the mother country; and whether it is possible to open up communication with our fellow-students there and let them see, by means of models or by drawings, what had been done in the past, and what was being done in the present, was a question which, perhaps, might be considered by some responsible committee.

Mr. H. G. IBBERSON [F.], in associating himself with the vote of thanks, said he should like to say how glad he was in hearing the Paper and the discussion to find that there was so much said about instruction and so little about examination. When the necessity for examination was made unduly prominent there was a tendency for the pupil to regard it as an end rather than a means, and to make harmful use of the professional crammer. Instruction should make a man able to act with intelligence in unfamiliar circumstances. Apparently even that given at our older Universities fails occasionally, for the late Bishop Creighton stated that he was "appalled" to find how little value he attached to academic honours when making appointments in the diocese of Peterborough, and that the most capable clergyman he had was only a Dublin "passman." He also felt that in education there was a danger that the instructor should force his mind and his ideas with too great vigour on the pupil, and so destroy that individuality which was one of the most valuable things in connection with a profession such as architecture. Passing from the general to the particular, he hoped that in any new scheme there would be an opportunity for pupils to be taught what might be described as "the gentle art of condemning materials"! He remembered at his examination a little table with an estimable gentleman on one side of it and various specimens of material on the top; but he did not remember that any of the materials were bad materials. He had since found that it was more difficult to distinguish between good deal and bad deal than it was to be able to distinguish between deal and oak! He once, when calling upon some friends of his who were timber merchants, was shown a letter to this effect: "Dear Sirs,—The timber which you sent to such-and-such a job, brand XX, three owls, and a Y, has not been deemed satisfactory by the architect, and we think brand XX, two owls, and a T, which is brighter in colour, would be more what he likes. Kindly send the same, and"—and this is the more important part—"when you send in your account to us make the necessary deduction"!

Mr. EDMUND WOODTHORPE, M.A. [F.], said he was very pleased indeed to hear Sir Arthur

Rücker say that the University of London was prepared to do all it could to help on architectural education. He had always thought that what they wanted was another Cecil Rhodes who would found Chairs of Architecture at the older Universities. They should also, if possible, have a final school in architecture. Architecture was far more important, he considered, and probably they all considered, than medicine, even, for the health and happiness of the population; but architecture seemed to be absolutely neglected by the public, so far as education goes. At nearly all the public schools, and even at the elementary schools, drawing is almost absolutely neglected. He had been at a public school and had learnt drawing all the time; but the drawing was practically untaught—it was merely mechanical work of little good to anyone. The drawing also had to be done in the time that would otherwise have been devoted to football or cricket, and very few cared about giving up that time. One point that Mr. Blomfield did not allude to, and which he (the speaker) thought was perhaps the best education that an architect could get in general construction and the carrying out of building, was acting as clerk of the works. At the present time he believed it was not so much in vogue for the young architect to act as clerk of the works on buildings, after he was out of his articles, as it used to be. He was certain, however, that the young architect picked up, and was likely to pick up, more practical knowledge in that way than in almost any other. With regard to this scheme of education he remembered that the Papers on Education read at the Conference of Architects in 1887 practically embraced a great deal of what had been put forward that evening. The Papers he referred to were by men of wide practical experience and knowledge, gained in other countries as well as in England, on this subject, and were read at the conference presided over by the late Mr. Arthur Cates, whom he regarded as the pioneer of architectural education, for he had done more in this matter than anyone in recent days. He hoped sincerely that the outcome of this work would be more prolific of good than that conference was. Much good had been done at Liverpool by Professor Simpson and by others in the various schools, and he confessed he was rather surprised to hear Mr. Jackson say that whatever they did with the students he was always doubtful of the result. He (the speaker) was not at all doubtful of the result, provided the final test was by examination. He did not at all agree with what the last speaker had said about examination. Probably there are about 10 per cent. of all the architects and members of other professions who succeed and get to the top of the tree who do not believe in examinations, who will work without examinations, who will read and remember what they read without examinations; but the other 90 per cent., unless they have got some examina-

tion to work up to, will never really get into their heads and remember what they have read. The great idea of education is to put into one's head properly everything that one ought to know; and working up for an examination aids the average student in a way that desultory reading on his own account would never do. What the young architect wants is to know what books he can refer to on any particular subject. There is so much to learn in the present day, with so many new materials and methods constantly coming into vogue, that one cannot possibly remember them all. He was very glad to support the vote of thanks to Mr. Blomfield for the great trouble he had taken in bringing this matter before them.

THE PRESIDENT, in putting the vote of thanks, said they had had a good practical Paper from Mr. Blomfield, for which they were exceedingly obliged to him. He had not only put before them, in a clear and concise manner, their past faults, but he had laid down the lines on which architectural education must be developed in future. Of course, as they might easily expect, there would be a great diversity of opinion on details; these variations depended upon temperament and outlook and the general experience of the architect himself. But while uniformity of principle was important, it was not essential that the details should be altogether the same; they might vary according to the needs and necessities of the districts where the schools were located. The remarks that they had heard that evening had very much cleared the ground, and when the scheme of the Architectural Board came before them they should be ready to accept it generally, to the advantage of architectural education.

Mr. BLOMFIELD, in responding, said he had been really bewildered by the number of excellent suggestions which had been poured out since he sat down. He did not follow them all entirely—as, for instance, Mr. Woodthorpe's suggestion that the Universities should take up this question of architectural education, and, as he understood, establish an Honours School. It seemed to him a little impracticable, especially as architecture was an extremely practical affair, dealing with bricks and mortar. Mr. Woodthorpe's other point, that the pupil should act as clerk of the works, was all very well for the young student, but uncommonly bad for the client. If they sent a young man who scarcely knew brick from stone to overlook the builder, he did not think it was fair to the client, and he did not believe the pupil would learn unless he was under proper guidance. Various references had been made very kindly to his share in the proposed educational scheme. He should like to put that right at once. His colleague, Mr. Slater, and himself had been secretaries to the Board, and this report was the outcome of the deliberations of the Board, and was put together as the result of suggestions made by

members of the Board; therefore it was the collective report of many gentlemen who had given a great deal of time and trouble to this matter. He need hardly say in that room what an immense debt they owed to Sir Aston Webb as Chairman: his tact, patience, consideration and sympathy with all of them, and his sagacity in guiding their deliberations, had been admirable. He felt that this tribute was due to Sir Aston. It would be impossible for him to deal with many of the points which had been raised, but there were one or two fixed in his mind. Mr. Maurice Adams had made some very excellent remarks, though he could not quite agree with him about the result of the art students' competitions. He had himself acted as one of the Examiners in the National Art Competitions at South Kensington, and his experience differed from Mr. Adams's observations. The students had seemed to him and to his colleagues to fail precisely in those points that they were aiming at—the practical grasp of architecture. They would make beautiful fronts and façades, but they did not seem to have any grasp of what it all meant. They wanted to make them see that. He heartily endorsed the tribute to Professor Simpson's work. He had done admirable work in Liverpool, and he hoped he would continue to do it in London. Mr. Statham had made some interesting remarks in regard to French architecture. He (Mr. Blomfield) yielded to nobody in his admiration for French architecture; but he did not quite agree with Mr. Statham on this particular point—the amount of time occupied in their training with immensely elaborate draughtsmanship; it was clear that the student must devote a great deal of time to it, which might be devoted to other things.

MR. STATHAM: I was not defending it; I only said there was a fine side to it.

MR. BLOMFIELD: But that fine side might be got without all that elaborate pains and trouble; it seemed on all fours with those stipple drawings from the antique that one used to make with great care and pains and which were no use to one at all when they were done. Mr. Jackson had hit the nail on the head in one very important point: that is, that architecture, after all, was founded on reason. If it was not a matter based on the facts of existence and the practical handling of realities, it would have no serious touch with humanity at all. That was the one point they were attacking. They wanted to train the student to get rid of all shibboleths and conventions. They did not want him to look upon any particular style or method as sacrosanct, but to think for himself and to use his materials as a free and intelligent person; of course with full knowledge of what had been done in the past—they could not do without that. They must all be very grateful to Sir Arthur Rücker for the generous welcome he had extended to the scheme on his side. It was a most encouraging thing that the educational authorities should feel that we practical men were doing our best, and that they on their side should extend their hands to us and invite us to co-operate with them. He had endeavoured to make it clear that the uniformity for which he contended was not uniformity of detail, but uniformity of point of view. They wanted to get all the students to be working from the same point of view, to bring about the same general colour in the scheme, but still leaving them their individuality and freedom of handling. He would not detain them longer. The general conclusion he had come to in listening to the various speeches which had been made was the very welcome one that there was a great deal more agreement amongst them all, when they took the trouble to find it out, than might be supposed.



9, CONDUIT STREET, LONDON, W., 25th Feb. 1905.

CHRONICLE.

Congratulations to Mr. Reginald Blomfield, A.R.A.

At the General Meeting last Monday, prior to the delivery of the Paper printed on foregoing pages, the President took the opportunity of tendering the congratulations of the Institute to Mr. Reginald Blomfield on his election as Associate of the Royal Academy. They all admired Mr. Blomfield, he said, and recognised the zeal which he had displayed in connection with architectural education, as evidenced by his attendance that evening to give them the benefit of his views on the subject. Mr. Blomfield, in responding, said he thanked the members very heartily for their congratulations. The honour which had been paid him, he thought, was in his humble person an honour to their calling, and in that way he thanked them for the very kind sympathy they had shown him in the matter.

London Building Acts (Amendment).

The following is a list of the bodies who have lodged petitions against the London Building Acts Amendment Bill praying to be heard by Counsel. The Institute Petition was printed in the last number of the JOURNAL [pp. 227-30]:

1. London and India Docks Company; 2. Institution of Civil Engineers; 3. Metropolitan Borough of Stepney; 4. Ironmongers' Company; 5. Duke of Westminster; 6. Merchant Taylors' Company; 7. Ecclesiastical Commissioners for England; 8. Paddington Corporation; 9. Wandsworth Borough Council; 10. Hammersmith Borough Council; 11. Lord Llangattock and Others; 12. Edward Yates; 13. Haberdashers' Company and Others; 14. Hampstead Borough Council; 15. Governors of Bridewell and Bethlehem Hospitals; 16. Salters' Company; 17. Skinners' Company; 18. Royal Institute of British Architects; 19. District Surveyors' Association (Incorporated), London; 20. Goldsmiths' Company; 21. Mercers' Company; 22. Fishmongers' Company; 23. Vintners' Company; 24. Improved Industrial Dwellings Company; 25. Surrey Commercial Dock Company; 26. Grocers' Company; 27. Bethnal Green Borough Council; 28. Auctioneers' Institute of the United Kingdom; 29. Westminster Electric Supply Corporation; 30. Association for the Protection of Property Owners; 31. Surveyors' Institution; 32. Metropolitan Water Board; 33. Holborn Borough Council; 34. Hackney

Borough Council; 35. Clothworkers' Company; 36. London Chamber of Commerce (Incorporated); 37. Camberwell Borough Council; 38. Honourable Society of Lincoln's Inn; 39. Honourable Society of the Middle Temple; 40. Honourable Society of the Inner Temple; 41. Trustees and Managers of the Stock Exchange; 42. Railway Companies owning railways and lands within the Administrative County of London; 43. Westminster City Council; 44. Islington Borough Council; 45. Institute of Builders; 46. Gordon Hotels; 47. Stoke Newington Borough Council; 48. Fulham Borough Council; 49. Institution of Electrical Engineers; 50. Woolwich Borough Council; 51. Companies supplying Electrical Energy within the Administrative County of London; 52. General Storekeepers, Drapers, and Others as Owners, &c.; 53. Gas Light and Coke South Metropolitan and Commercial Gas Companies; 54. N. M. Rothschild and Sons and other Banking and Mercantile Houses; 55. Kensington Borough Council; 56. National Telephone Company; 57. Shore-ditch Borough Council; 58. Lambeth Borough Council; 59. Wharfingers' Association; 60. Association Owners of City Properties and Others; 61. Corporation of London; 62. Associated Landowners and Others; 63. St. Pancras Borough Council.

President Roosevelt on Architecture.

The President of the United States was the guest of the American Institute of Architects at their banquet on the 11th January. His address on the occasion was so admirable that members of the R.I.B.A. will be glad to preserve it in their JOURNAL. The *American Architect* reports it as follows:—

It is a great pleasure to have the chance of coming here this evening and saying a word of greeting to a body of men who are engaged in doing work for this Republic which is to count, not merely in the present generation, but during the lifetimes of many generations to come. We hear a great deal said about true Americanism. Now the real American, the American whom it is worth while to call such, is the man whose belief in and work for America are not merely for the America of to-day, but for the America of the future.

It is a comparatively easy thing to do work when the reward is to come in the present; but every great nation that has ever existed on this globe has been great because its sons had in them the capacity to work for the well-being of generations yet unborn. Such a spirit is peculiarly necessary when the work that we desire to have done is essentially work of a non-remunerative type, non-remunerative in more than one way: non-remunerative in money and, it may be, in fame. We do not know the names of the architects and builders of the great cathedrals whose magnificent bodies are an heirloom to civilisation. We do not know the names of the builders of the great majority of the works to which every man with any aspiration after beauty naturally turns when he thinks of the past. We owe that beauty, we owe the elevation of thought, of mind and soul that come with association and belief in it, to the fact that there were a sufficient number of

men who worked in the spirit that Ruskin prayed in—the spirit of doing work, not for the sake of the fame, but for the sake of the work itself.

There are things in a nation's life more important than beauty, but beauty is very important. And in this nation of ours, while there is very much in which we have succeeded marvellously, I do not think that, if we looked dispassionately, we will say that beauty has been exactly the strong point. It rests largely with gatherings such as this, with the note that is set by such men as those I am addressing to-night, to determine whether or not this shall be true of the future.

A very large percentage of the durable work, the work which is lasting, must be done by the Government. Great buildings and beautiful buildings will be erected by private subscription; but many of the grandest buildings must necessarily be erected by the Government, national, state, or municipal.

Those in control of any branch of that Government necessarily have but an ephemeral lease of power. Administration succeeds administration; congress succeeds congress; legislature succeeds legislature, and even if all of the administrations, all of the congresses, are actuated (a not necessarily probable supposition) by an artistic spirit, it would still remain true that there could not be a coherence of their work if they had to rely on themselves alone. The best thing that any administration, that any executive department of the Government, can do—and if I may venture to make any suggestion to a co-ordinate branch I would say that the best thing that any elective legislative body could do—is in these matters to surrender itself within reasonable limits to the guidance of those who really do know what they are talking about.

The only way in which we can hope to have worthy artistic work done for the nation, or for a state, or for a municipality is by having such a growth of popular sentiment as will render it incumbent upon successive administrations, successive legislative bodies, to carry out steadily a plan chosen for them, worked out for them by such a body of men as that gathered here this evening. What I have said does not mean that we shall go here in Washington, for instance, into immediate and extravagant expenditures on public buildings. All that it means is that, whenever hereafter a public building is provided for and erected, it should be erected in accordance with a carefully thought-out plan adopted long before, and that it should be not only beautiful in itself, but fitting in its relations to the whole scheme of the public buildings, the parks, the drives of the district.

Working through municipal commissions very great progress has already been made in rendering more beautiful our cities from New York to San

Francisco. An incredible amount remains to be done. But a beginning has been made, and now I most earnestly hope that in the national capital a better beginning will be made than anywhere else, and that can be made only by utilising to the fullest degree the thought and the disinterested effort of the architects, the artists, the men of art who stand foremost in their professions here in the United States, and who ask no other reward save the reward of feeling that they have done their full part to make as beautiful as it should be the capital city of the great Republic.

The late John Leaning, F.S.I.

The death of Mr. John Leaning, which occurred on the 5th inst., ought not to pass without a regretful reference in this JOURNAL, to which he was from time to time a contributor. His works on "Quantity Surveying," now in its fourth edition, "Conduct of Building Work," and "Building Specifications" are widely recognised authorities on the subjects treated; and his esteemed contributions to these columns were mainly reviews of books on these or kindred subjects. Mr. Leaning was born at Colchester in 1840, and as a young man spent some time in Australia in the office of the Surveyor to the Crown Lands at Melbourne. He returned to England in 1868 and established himself as a quantity surveyor, joining the Surveyors' Institution in 1888. He was an examiner of the City of London College and one of the original lecturers at the Architectural Association.

AN ENQUIRY INTO THE ORIGIN OF THE OFFICE AND TITLE OF "DISTRICT SURVEYOR."

By BERNARD DICKSEE [F.].

NOW that attempt is being made in the London Building Act Amendment Bill to destroy the independent statutory position of the District Surveyor, and convert him into a mere salaried officer of the County Council, thus completely altering the system under which the Building Acts of London have hitherto been administered, a retrospect of the history of the origin of the office and title of District Surveyor will, I venture to think, be of interest.

Though probably little known to the general public, the office of District Surveyor is of considerable antiquity, dating as it does from the Great Fire of London. In A.D. 1667 was passed "An Act for rebuilding the City of London" (19 Car. II., cap. 3). By section 4 of that Act the Lord Mayor, Aldermen, and Common Council of the City of London were required to appoint "one

or more discreet and intelligent person or persons in the Art of Building to be the Surveyors or Supervisors to see the said rules and scantlings well and truly observed," and such Surveyors or Supervisors were required to take oath that they would properly perform their duties. This Act, which remained in force until repealed in 1772, contained, among other requirements, provisions for the separation of buildings by party-walls. By 6 Anne, cap. 31, section 4, party-walls, as therein described, were required to be provided to all houses in London and Westminster, and within the area of the Weekly Bills of Mortality. Outside the City no Surveyor or Supervisor appears to have been appointed; there was, however, a penalty of £50 for the non-observance of the law, and possibly the common informer was relied upon to enforce it. 7 Anne, cap. 18, amended the Act of the previous year, among other things exempting the buildings on London Bridge, but left the administration of the law as before. 11 Geo. I., cap. 28 (A.D. 1725) further amended the law, and extended it to the parishes of St. Pancras, St. Marylebone, Paddington, and Chelsea, at the same time providing rules for the rebuilding of party-walls. 33 Geo. II., cap. 31, increased the thickness of party-walls. Up to this time no procedure for enforcing the Acts outside the City can be traced, but in the next statute, 4 Geo. III., cap. 14 (A.D. 1764), it was enacted, in section 7, that master builders were to have the building, on roofing-in, surveyed by one or more surveyors, who were required to take oath before the Justices of the Peace in Westminster or Middlesex that the building had been erected in accordance with the Act. Apparently, as 19 Car. II., cap. 3, had not been repealed, the "Surveyor or Supervisor" remained in authority within the City. The 1764 Act was the first to demand the party parapet (section 8), which was required to be carried 18 inches above the roof. 6 Geo. III., cap. 27 (A.D. 1766), extended only to the City, and related to streets and party-walls.

All the above-mentioned Acts remained in force until 1772, when 12 Geo. III., cap. 73, was passed, applying to the same area as the 1725 Act, and repealing so much of the previous Acts "as relates to buildings and party-walls," but apparently, as no new rules were provided, leaving the administration as before.

This Act survived only two years, and was repealed by 14 Geo. III., cap. 78 (A.D. 1774), by section 62 of which Act the Lord Mayor and Aldermen in the City of London (the Common Council were dropped out) and the Justices of the Peace in their respective General Quarter Sessions, subject to the consent of the Secretary of State, were required to appoint the "Surveyors or Supervisors," who were to take oath to observe and enforce the Act. This was the first establishment of the District Surveyor outside the City of

London. A provision in this Act worthy of note is contained in section 63, which enacted that if any builder neglected to give notice to the "Surveyor or Supervisor" he should forfeit and pay to such Surveyor treble fees. This Act was far more comprehensive than any of its predecessors: it divided buildings into seven rates, each with its own set of rules, and contained a scale of fees to be paid to the Surveyor or Supervisor according to the rate. This Act remained in force until superseded by the Metropolitan Building Act 1844 (7 & 8 Vict., cap. 84), in which the District Surveyor received his present title of "District Surveyor." By section 65 he was appointed, as in the Act of 1774, by the Lord Mayor and Aldermen and the Justices of the Peace respectively, with the consent of the Secretary of State; and by section 56 he had to be qualified by examination by a special Board of Examiners consisting of not less than three architects. Section 70 enacted that Surveyors then in office under the Act of 1774 should continue to be District Surveyors under the Act, "and every provision in this Act applicable to District Surveyors so far as relates to the exercise of the office of Surveyor and to their remuneration in that Behalf shall apply to them." The remuneration as in the previous Act was by way of fees, which varied according to the "rate" and to a certain extent the size of the building. Section 76 provided that where the District Surveyor acted professionally on a building in his own district the building was to be "surveyed by another District Surveyor."

The Metropolitan Building Act 1855 (18 & 19 Vict., cap. 122), which repealed the Act of 1844, confirmed the District Surveyors in their position, transferring the appointment of new surveyors to the newly created Metropolitan Board of Works and establishing the Royal Institute of British Architects as the examining body.

The question of the status of District Surveyors and the desirability or otherwise of making them officers of the Metropolitan Board of Works was thoroughly enquired into before a Select Committee of the House of Commons on the proposed Metropolitan Buildings and Management Bill 1874 (which never became law), when, after hearing many witnesses, the Committee decided "that with regard to District Surveyors their status should remain the same as under former Acts of Parliament."

On the creation of the London County Council, and the extinction of the Metropolitan Board of Works in 1888, the appointment of new Surveyors passed to the newly created Council, who thereupon sought to impose conditions not contemplated by the Acts upon all candidates for the office of District Surveyor, among which was an obligation not to practise as an architect or surveyor. When the present London Building Act 1894 (57 & 58 Vict., cap. 213) was before Parliament the County

Council sought to obtain parliamentary sanction to these conditions by adding to their power of appointment words to the effect that they might impose such conditions on the appointment as they might think fit. Such sanction was refused, and the words were struck out of the Bill, leaving the law in the same position as it was under the Act of 1855, which in that respect followed the Acts of 1844 and 1774.

The facts may be briefly summarised as follows:—

The office of District Surveyor has existed in the City of London since 1667, and in London outside the City since 1774.

The statutory title "District Surveyor" has existed since 1844, though evidently in use earlier.

The District Surveyor has been paid by fees calculated on the building, at least since 1774.

His right to practise as an architect or surveyor has been recognised at least since 1774, and power to restrict this right was refused by Parliament in 1874, and again in 1894.

The status of the District Surveyor and his predecessor the "Surveyor or Supervisor" as an independent statutory officer has been recognised by all the statutes.

RURAL BY-LAWS.

To the Editor of the JOURNAL R.I.B.A.,—

SIR,—It may be of interest to members of the Institute to know that the Paper read by Mr. Lacy W. Ridge on the above subject, together with the resolution passed at the subsequent meeting on the 9th January, have already had a very practical result. As reported in the *Hampshire Independent* of 4th February 1905, the following proposition was unanimously agreed to by the South Stoneham District Council.

"The attention of this Council having been called to the following resolution passed by the Royal Institute of British Architects on 9th January 1905—'That in the opinion of this Meeting it is desirable that the Local Government Board should obtain parliamentary powers to enable it to reform the by-laws now in force in rural districts and in the smaller towns with a view to the enactment of such by-laws, and such by-laws only, as are required in the public interest'—it is resolved that the Clerk of this District Council be instructed to communicate with the Local Government Board informing them that the resolution of the Royal Institute of British Architects has the sympathy and support of this District Council."

It would be a great advantage if members of the Institute could bring this matter before those in a position to submit similar resolutions to local authorities, as this would greatly assist the Local

Government Board in obtaining the suggested powers.

The by-laws of the District Council referred to are far more stringent and "impossible" than those of many large towns, although their district is entirely a rural one; so it will be a great advantage if the Local Government Board can take the matter in hand.—Yours faithfully,

N. C. H. NISBETT [A.].

REVIEWS.

BUILDINGS IN THE COTSWOLDS.

Old Cottages, Farmhouses, and other Stone Buildings in the Cotswold District. By W. Galsworthy Davie and E. Guy Dawber. La. 8o. Lond. 1905. Price 21s. net. [B. T. Batsford, 94 High Holborn.]

This volume, in which Mr. Guy Dawber gives us an introduction of some seventy pages to a series of reproductions from photographs specially taken by Mr. Galsworthy Davie, is attractive outside and in, with its admirably designed cover and its excellent and well-chosen illustrations.

If such a book were of no further use it would serve as an historical record of a type of buildings which have almost disappeared in many parts of the country, and which the lapse of time, model by-laws, and agricultural depression are rendering fewer and fewer year by year. If only some kind soul had done the same by Oxford some twenty-five years ago—and Oxford may almost be regarded as a part of the style with which this book deals—the record would have preserved to us a large number of really beautiful buildings of minor importance which have since been swept away, leaving the town the poorer and the uglier. Will not someone collect the remainder?

But, apart from its historical aspect, the subject is one of intrinsic beauty and interest, since it deals with spontaneous and simple architecture of the country without affectation or attempt, which should be a standing rebuke to most of those who preside over the corresponding efforts of our own day, and an inspiration to those who would help to better them. The book deals only with smaller buildings, and does not touch upon the manor houses that abound along the course of the trout streams in the valleys standing among rich meadows, fine timber, and clustering farms and cottages, such as are here described and pictured; but the letterpress is well worth study, and the illustrative sketches and plates are admirably chosen to bring out the characteristics of the Cotswold stonework.

The plans are given of some of these cottages and farmhouses, but there is not much in them to arrest attention. The real interest lies in the methods by which from the simplest plans charm-

ing and picturesque exteriors are obtained, owing to the grouping of roofs and chimneys, the spacing of solids and voids, and the arrangement and design of windows and doors. From such methods invaluable lessons may be learned, though they may not conform to conditions under which the modern architect has to work.

Particularly interesting are the descriptions and illustrations of the masonry of the sixteenth and seventeenth centuries, and of the methods of getting and laying the slates, upon which the effect of the buildings so much depends. Traditional methods are still followed, and no slates and no slaters make better roofs to-day.

Nothing of its kind surpasses the fine sweep and colour of the great barn roofs that cluster round the houses; and, while there is much charm, as Mr. Dawber says, "in the absence of small outbuildings, which detract from the restfulness of the main house," one cannot help feeling that some of them gain very much from the picturesque grouping of accessory buildings that surround and buttress them. One may instance, among many others of the farm or manor-house type, the house at Syde, and, though, of course, on a much larger scale, Shipton Court.

One might wish that elevations or views could have been placed with some of the plans, so that the architectural growth from their simple lines might have been compared with them. Plates as well as plans are given of Medford House, Mickleton, and of a cottage at Snowhill; but unfortunately the reference to the plate is wrongly given in the text. Again, on page 38 we are referred to Plate LXX. for an example at Paxford, to which we turn and find there a group of cottages at Bibury. (Oh, for a sketchbook and a rod in may-fly time at Bibury!) One may also instance such inaccuracies as the assignment of Lyddington to Northants in the text and to Rutland on the plate, and of a finial to Broadway in the text and to Broadwell in the accompanying marginal sketch. Such inaccuracies are not uncommon, and are certainly inconvenient to the reader; but they do not affect the value of the book, and may be noticed with a view to their being corrected in future editions, which it is hoped may follow.

Later developments of the style, as Mr. Dawber notes, consisted chiefly in alteration of mouldings, and not in general traditional treatment. Their character and section changed, but not their function in the design, and the treatment of wall spaces, and of roofs and dormers and eaves, underwent scarcely if any modification. He gives various instances and illustrations, and the reviewer remembers one example with which he was struck behind the park at Great Barrington.

The interest of the plates is maintained throughout, and the last and hundredth is one of the most charming of them all.

PERCY S. WORTHINGTON.

ALLIED SOCIETIES.

THE LEEDS AND YORKSHIRE SOCIETY.

Modern Architecture in London.

At the rooms of the above Society on Thursday, the 8th inst., Miss Ethel Charles [A.] read a paper on "Modern Architecture in London," Mr. G. B. Bulmer [F.], President, in the Chair. The lecturer said that London had the reputation of containing more bad work than any city in the world for its size, though it also contained some of the finest buildings in existence; most of these latter, however, had been erected during the last thirty years. The use of salt-glazed bricks was recommended, as they keep their colour and do not collect the dirt and grime like stone and brick. Slides were shown of New Scotland Yard, the National Liberal Club, the City of London Schools, the London School Board Offices, and many others, which illustrated how the general tendency of modern work is to experiment rather than to rely on tradition; how modern work is personal rather than national, and is characterised by endless diversity; and how this diversity is further intensified by the complexity of modern life and modern requirements, and by the large choice of material within easy reach. Steel, unacknowledged, plays a prominent part in modern designs, accounting for much of the unsatisfactory appearance of our street architecture. Many of the buildings on the Embankment were shown, as this is the most successful river frontage in Europe; it would be difficult to find in any other city so many fine and important buildings in one street ranging from the Houses of Parliament to the Electric Light Station, and it offers excellent examples of buildings devoted to the most varied purposes. There were also shown slides of various business premises in the City as illustrative of the fact that it is to the commercial element of our social condition that we must look for the growing prospects of London architecture.

G. ERNEST REASON.

THE SHEFFIELD SOCIETY.

Relation of Design and Handicraft.

At the ordinary monthly meeting of the above Society, held on the 9th inst. in the lecture hall of the Literary and Philosophical Society, Mr. T. Swaffield Brown read a Paper on "The Proper Relation of Design and Handicraft." There were signs, he said, that the efforts of great thinkers had stirred the still waters of apathy and brought to the surface one or two questions whose apparent complexity had diverted attention from their origin and hindered their solution. One of these was that of the proper relations of design and handicraft, about which much had been said

and written by those whose trade it was to talk and write, but little by designers and craftsmen, whose business it was to know and to do. The architect was the arch-type of designers, because the architecture of nations is the petrified symbol of the sum of their art, and of much else of importance in their history. And even now most design and work was in some way dependent upon architecture. Therefore it seemed a fitting opportunity to speak upon the relationship of design and handicraft. He thought these were not in a healthy condition, because of the common use of the two terms as things apart, not merely qualities of the same thing as inseparable for use as soul and body. And they were not only spoken of, but treated as things to be practised by separate individuals, separate classes, and in separate places. He attributed this partly to the modern propensity for analysis rather than synthesis, which concentrates attention upon parts and loses sight of the whole. And so the significance of the word "art" is lost, and it is applied to what is not art, just as "charity," religion, and so on, are applied to quite different things. But, fortunately, as a matter of practice, the complete division of the spiritual and material was impossible, because no conception could become visible except through handicraft of some degree. The use of pen or pencil to record it was handicraft; but the greatest skill in the use of the chosen instrument would not produce a work of art in the absence of conception. Want of appreciation of this simple fact had caused great errors, and efforts to grasp it had led to absurd results for lack of comprehension. The former led to the destructive division of the two functions, the latter to the crippling of them by unfitting union. He, then, while disclaiming any concern with any but "applied" art in this lecture, called attention to the immense utility of "gallery" art as furnishing specimens illustrative of the effective co-operation of motive, conception, and execution, unhampered by commercial or other deterrent influence, and forming precious ideals for our guidance. But it must be recognised that in applied art, although the same principles govern, their application is subject to the limitations of material &c., and it is necessary to economise power by confining the best effort, which is the rarest, to the tasks which need it most. And this was "specialisation," which he thought was, by unwise use, the cause of much of the mischief, because it led to the arbitrary choice of unfit material for the making of the craftsman to fit the subdivision of specialism, instead of encouraging his development to his fittest place. And so the designer and craftsman lose touch of each other, and their work suffers in consequence, as well as the men. He then referred to the older methods under which the craftsman practised his craft with full scope for his power, and whose position depended upon that, and advocated the adoption of

similar methods; but pointed out that the change must be gradual, for fear of greater confusion. For although he attributed the mischief to over-specialisation, this in itself was but one of the results of "civilisation," and had grown with it. This civilisation had been defined as the "art of living in cities." He would prefer to call it becoming "inured" to them, and insensible to the influence of beauty; and he then endeavoured to show how their incidents affected art—which was the very and only remedy for them—so that things seemed at a deadlock. But it was not so, because such societies as theirs showed that some men were not content to remain in apathetic indifference. The effort of the last fifty years to popularise art practice had failed because it attempted to teach the unteachable. Art could not be taught. He gave some of the results of last year's examinations in support of the statement of failure. He suggested that the remedy was a system of co-ordinate education which, beginning in the school, should lead the child through its different stages by selection at each step, eliminating early those whose dispositions were towards mechanical or commercial pursuits, and taking the others by wise advice and guidance along the paths which their experience and tastes led them to choose, not putting them through the usual rigid course which so often leads to disgust and abandonment. He thought that this would restore the unity of art practice and elevate the worker, creating a force which would ultimately crush the sordid influences which made our surroundings what they were.

MINUTES. VIII.

At the Eighth General Meeting (Ordinary) of the Session 1904-5, held Monday, 20th February 1905, at 8 p.m.—Present: Mr. John Belcher, A.R.A., *President*, in the Chair, 37 Fellows (including 13 members of the Council), 32 Associates (including 1 member of the Council), 1 Hon. Associate, and visitors—the Minutes of the Meeting held Monday, 6th February 1905 [p. 235] were taken as read and signed as correct.

The Hon. Secretary announced the decease of James Thomson, of Glasgow, *Fellow*, elected 1878; and James Barnet, of Sydney, New South Wales, *Fellow*, elected 1886.

The President tendered the congratulations of the Institute to Mr. Reginald Blomfield on his election as Associate of the Royal Academy.

A Paper on ARCHITECTURAL EDUCATION having been read by Mr. Reginald Blomfield, the subject was discussed by Sir Arthur Rücker, F.R.S., Principal of the University of London; Sir Aston Webb, R.A., Mr. T. G. Jackson, R.A., Mr. John Slater, Mr. H. Heathcote Statham, Mr. Maurice B. Adams, Mr. Edmund Woodthorpe, and others: at the conclusion thereof a vote of thanks was passed to Mr. Blomfield by acclamation.

The proceedings closed, and the Meeting separated at 10 p.m.

tariff reform, or fiscal schemes, though these questions do touch more or less directly what we have in mind. Apart from these allied affairs, upon which most likely we entertain different views, it can surely enough only be recognised that circumstances beyond our control have settled for us, once and for ever, the unrelenting demand for individual equipment and educational efficiency if we are to hold our own in the cosmopolitan possibilities of the immediate future.

Retrospectively the story concerning the origin of libraries and their subsequent history abounds in incidents of the utmost interest. Harking back to the mists of the far-distant past, we find that the famous "Record Office" which Assur-bani-pal founded more than twenty-five centuries ago at Kouyunjik stands out among the earliest libraries known, though the discovery four years ago of the library of the great temple at Nippur by Dr. Peters, of New York, carries back Babylonian civilisation to a period no less remote than 7,000 years before the Christian era. No document was found at Nippur of later date than 2280 B.C. The total number of tablets so discovered amounted to very many thousands, each being covered with cuneiform writing. Nippur is identified, it is said, with Calneh, one of the four cities mentioned in the Book of Genesis at the beginning of the kingdom of Nimrod.

This storehouse of Babylonian learning was arranged probably on clay or slate shelves, like a similar collection found at Derr, where the bricks or clay tablets were inscribed in the forgotten language known as the Sumerian. We have learned much since then, but we still are in the dark as to whether the librarian of those days required any sort of wheelbarrow when attending to the wants of some more than ordinary voracious reader. These little bricks, anyhow, must have been most tiresome to handle and house, and exceedingly difficult to catalogue for ready reference.

It is not my intention to pursue this aspect of the library, and I do not propose to trace what has been termed the genesis of the modern library through these ages of antiquity, or to note even the leading historic libraries of the world, ancient or modern, such, for example, as that of Pergamon, founded two centuries B.C., with its 200,000 volumes. Midst the crash of empires libraries more or less famous have always existed, and private collections were, fortunately for posterity, preserved, as in the book closets, say, of the Roman period, wherein the "Codex" or book in the modern sense was known. Subsequently the great library of the Vatican, the Laurentian Library at Florence, that of St. Mark's, Venice, the Radcliffe at Oxford, the library of Trinity College, Cambridge, and many more like the chained libraries of mediæval origin at Hereford and elsewhere fill to the full the page of history, which, however, must now no longer detain us. Their story has been so well described before—far better than I could hope to do—though it remains, perhaps, to repeat here what has quite lately been said by an eminent speaker: "Those who know very little of the past, and care very little for the future, are those who make the poorest business of the present."

The bibliography of the contemporary library is increasing, and librarians have also written much that is germane to its contrivance from their point of view. Possibly, therefore, it may be thought that little of practical importance remains to be discussed as deserving of your attention. Nevertheless, by attempting to gather up in some degree the knowledge which comes of experience, it is to be hoped that our present inquiry may be found opportune, seeing that the time has arrived when circumstances suggest the desirability of ascertaining whether the main principles hitherto in vogue are still equal to the requirements of the day; also whether our library buildings generally are precisely adapted to the ends in view.

That a considerable number of these institutions now in progress of erection are admirably planned few would attempt to deny; but are we quite so sure that the majority of them are exactly equal to the demands which are already asserting themselves in regard to the ever-

extending enterprise of education which in the near future is calculated to assume even still larger proportions?

Dogmatic rules, however ingeniously formulated, cannot be adopted as universally applicable, and ideal plans, useful as they undoubtedly are, possess only a qualified value, being always more or less subject to modification owing to local requirements and actual conditions in individual cases which have to be dealt with on their own merits.

In accepting the invitation of your Society to read a Paper on "Library Design," I will endeavour to avoid going over the same ground which has been so well covered before.* My aim in dealing with this subject has not been so much to enlarge upon my own personal ideas about a class of buildings with which my practice has been associated as to bring to a focus the mature opinions available of those best calculated by every-day practical experience in the management of libraries to tell us what they have found most satisfactory and most adapted to their purpose in the libraries we have built, as also to let us know wherein they fail.

With this object, before commencing to collate my notes for this occasion, I put myself in communication with fifty librarians in command of some of the chief rate-aided public libraries in England, and about half a dozen leading questions were addressed to my correspondents. My warmest acknowledgments are due to these gentlemen, on whose busy time I could have no possible claim, and I thank one and all sincerely for the valuable letters which so many kindly sent me. By this means I hoped to learn what librarians really want and to find out some of the faults which we architects would do well to avoid in future. It will be admitted that practical deductions such as these ought to prove the best procurable guide, and in the result such an assumption has been found justified. As the answers gradually arrived I realised, however, that the multiplicity of counsellors, besides reassuring me of a safe position, introduced a conflicting element of contradiction on some salient points, which perhaps, after all, is to be reckoned as the most valuable asset of my little interrogatory. One of course did not expect any cut-and-dried consensus of opinion even on main details, and perhaps the replies received differentiate far less than might have been expected. It is scarcely possible to tabulate the answers, and I am unable to abstract a concrete judgment in the form of a definite result to my inquiry. For one reason this is so because librarians, like other mortals, find a difficulty in giving "Yes" or "No" for reply without a saving clause or extenuating circumstances.

I will presently attempt to supply in as concise and consecutive a manner as I can the substance of the information thus furnished, so as to share with you the advantage of its annotation.

Prior to entering upon any discussion in detail about the special arrangement of library buildings, it will be convenient briefly to allude to the subject of library provision in its wider aspect. This reference at once brings us face to face with the stern realities of what is called the "penny rate." The penny rate was fixed more than fifty years ago, when the question of public libraries was treated, as all experiments naturally are, in a half-hearted way, and, as a consequence, what was then thought ample has not only become an inadequate provision, but it is no longer capable of ensuring any real economy. Since those days the library movement has outdistanced the wildest expectations even in England.

As the law stands, any town can by a special Act of Parliament augment its penny rate support for library purposes. Twenty-eight boroughs, with satisfactory results, have done

* "The Libraries of the Middle Ages," by T. G. Jackson, R.A., *JOURNAL R.I.B.A.*, Vol. V., 3rd Series, p. 365, read 16th May 1898; "Public Libraries," by the late J. M. Brydon and Mr. F. J. Burgoyne, Vol. VI. p. 209, read 20th February

1899; "The Planning of some recent Library Buildings in the United States," by Sidney K. Greenslade, Vol. IX. p. 229, read 17th March 1902.

so. Amongst these no limit whatever exists in either Birmingham, St. Helens, Oldham, or Huddersfield. In Birmingham the rate now stands at $1\frac{1}{2}d.$, and has never exceeded $1\frac{3}{4}d.$ In St. Helens $1\frac{1}{2}d.$ has been voted sufficient. Huddersfield is content with a penny in the pound, and at Oldham a $3d.$ rate obtains; but it is there levied on only two-thirds of the gross rental, and provides for museums and art gallery as well.

The increased powers thus obtained in these twenty-eight towns have not resulted in any reckless expenditure, and what has happened in these centres of intellectual activity and material advancement goes to show that if a fuller scope in the same direction were accorded generally, wasteful outlay would not necessarily result. Only in five of these towns has the library rate exceeded $2d.$, thirteen are content with $2d.$, and in eight towns $1\frac{1}{2}d.$ only has been reached.

This comparison leads us to turn our attention again for a moment to Oldham with its $3d.$ rate. That town possesses one of the most efficient systems for the distribution of books to be found anywhere in operation in England. Mr. Robert Bateman, the well-known librarian of the Whitworth Institute at Manchester, tells me that the Oldham distributing stations are located when conveniently possible at sub-post offices, the attendant of the same acting for postal and library business, and the stations are open during the same hours as the central library. Usually a small stock of books is provided, and the borrowers may either select from these or leave a list of books that are wanted. This list is forwarded to the central library, and one of the books thus asked for is sent to the branch the following day, there to await the borrower's application. Systematic daily collections and deliveries of books are made, so that the outlying districts are fairly well served, no less than 70,000 to 80,000 volumes being issued by these means every year at distances from one to two miles from the central library. The economy of this method is demonstrated by the fact that the cost amounts to only £220 annually; and this distribution in no way diminishes the ordinary issue at the central institution. The wide reputation of the picture gallery exhibitions at Oldham can only be secured by continued expense; and whatever that may be, the $3d.$ rate already referred to covers the outlay on it as well as on the museum.

At Croydon, where the penny rate rules expenditure, the system of distribution is very ingeniously managed, being in one respect, I understand, unique owing to the regulation which enables the borrower to procure a book on the day of application at any of the libraries of the town and return it, when done with, to either of the branches or central library. All the libraries are in telephonic communication, so that in a few minutes it can be ascertained whether any volume is available; and if the book happens to be at either of the depots other than that at which the application is made, the book is dispatched by the next borough tramcar passing that station, and a messenger awaits its arrival by meeting the tram when the car arrives at a given point near the library where the application was registered. This transport of books is made free of charge by the town cars. If a special motor car for library purposes could be provided a distribution might easily be made to all the branches twice or, if necessary, three times a day. Before passing on from Croydon I should like to mention that they have an admirable plan for circulating unbound photographs for art students from the libraries, using special little folio envelopes for the purpose. A bi-monthly magazine called *The Reader's Index* is issued by the Libraries Committee giving particulars of all the new books as they are added to the lending department with their catalogue numbers, sample reviews, and quotations from their prefaces, and I am informed that similar "buletines" are gradually becoming more general.

It requires little imagination to realise what a direful struggle to make ends meet in many a small township and country village must be experienced with only a penny rate for library

purposes. In most places the attempt is practically impossible. The total sum available in some instances can hardly suffice to light and warm even a small building, not to mention the purchase of books and papers with other current expenses. If in fairly big towns the penny rate is not enough, the whole thing in villages becomes preposterous. No restriction is imposed by statute on the rates to be levied for any other necessity in municipal development, such as baths and water supply, tramways, electric lighting, dust destructors, and every other form of enterprise. The library alone is fettered and hindered; and as the library has to be co-ordinated with educational advancement some means must be found to enable the educational authority now established on the recently extended basis to co-operate with the library committees of Borough and County or District Councils. Grants to libraries have in some places been made for technical education out of what is called the "whisky money," but the existing incomplete and fitfully wasteful way of managing these affairs is far from satisfactory. Consider the loss of efficiency and waste financially resulting from the overlapping which occurs through different bodies having to work various branches of what should be administered in the most effective and economic way by one central body empowered to grant aid and exercise control. Under the Education Act, 1902-3, the powers of the local authorities now include the provision of education in all its forms, and it is most desirable that the public library administration should be included with the rest of the work.

By all means preserve local interest by ensuring local proprietorship in all public libraries and schools, reserving too a proportionate share in the responsibility of provision as well as maintenance similarly to the economic arrangement applicable to every other municipal or public institution worked on Local Government lines; but in some way or another the Board of Education, as representing the State, should certainly be possessed of statutory qualifications to include library enterprise when making grants for educational extensions based no doubt upon the relative amounts contributed for such purposes by means of the local rates. The present condition of things would not be tolerated a day longer in America, where libraries for many years have outdistanced our limited ideals in almost every particular.

The system of State aid for libraries obtains in Canada, Australia, and South Africa. The different States in America tax the value of property to establish and maintain libraries. The Government also has erected the Congressional Library at Washington, not as a mere reference library for the legislative branch of the Government, but as "the library of the whole American people directly serving the interests of the entire country." The New York Public Library when finished will rank as one of the most notable buildings of the modern world. The area of the city of Boston is about the same as Liverpool or Manchester, with a population of, say, 550,000. Its central library cost £473,000, and contains 800,000 books. There are ten branch libraries in the town besides, with an average of 20,000 volumes each. The yearly cost of maintenance is £52,000, out of which the city purse provides £47,000, the difference being met by donations and such like. I will not attempt on this occasion to describe this magnificent library, with its grand series of decorative paintings by Mr. Edwin Austin Abbey, which make it unique; but I may just mention one mechanical detail. The books from the stack-room alcoves are delivered in wire baskets running at the rate of 500 feet per minute on little electric tramways attached to the delivery centre. The books in some of these American libraries are dusted by means of horse-power fans discharging the dust-laden air outside the buildings.

By way of comparison with the figures just quoted, turning again to Oldham, with its unique 3d. rate, it may be mentioned that the total so realised amounts to only £5,783 a year. The total issue of books in that borough is 167,142, as contrasted with 1,868,122 in Manchester, where, it may be useful to add, the 1½d. rate realises £18,200 a year for libraries. In

Massachusetts the State subsidises public libraries, not only in big and small towns, but in every village. I desire to go a step further than that, but in this way. I propose that imperial taxation should subsidise the library, not as a library alone, but as an auxiliary co-ordinated with the State provision for education pure and simple. At present this is beyond the statutory powers available; but surely so obvious and practical a course ought to be adopted without further delay by an enlightened Government. I will avoid pursuing statistics further, because figures are not entertaining to listen to, and, indeed, the above quotations will suffice to indicate the relative importance with which our hard-headed cousins beyond the Atlantic regard library legislation as compared with the Britisher's more restricted and localised notions. The fact is, we are lagging behind in the old-fashioned narrow path which is little likely to lead to any progress proportionate to the equipment of a pioneer race. It has been said that "the greatest citizen should not be above the public library, and the public library should not be above the meanest citizen." The question is, How best to elevate and reach the latter, so as to benefit him for pioneer duties. I am not arguing, nevertheless, in the direction of unlimited expenditure? Extravagance, we all know, inevitably means disaster. Frugality and thrift, unpopular though they be, are still the precursors of affluence; but a penny-wise-and-pound-foolish policy, so much favoured at election time, may prove extremely shortsighted, and at times it belongs, in fact, to the same category as mendacity in finance. Millions of money in the meanwhile are every year wasted in betting and in gambling speculations; vast sums go in transitory amusements and on unremunerative indulgences, regardless of the consequences, by all classes, who often begrudge even the penny rate, and vote, as a matter of course, against the adoption of the Library Acts on principle. All this is immeasurably shortsighted.

The further consideration to which, for a few minutes, we may usefully direct our attention before coming to the details of library planning has reference to another general question about which it is not easy to define exact conclusions. "Are a larger number of small libraries better than a smaller number of bigger buildings? The multiplication of branch libraries is, perhaps, a doubtful expedient; but on enquiring more closely into the matter it will be found that the solution of the inquiry depends very much upon the population per acre. At West Ham, the home of labour, there are three or four branch libraries which are most useful: a result largely due to the fact that readers are allowed to take away books from any library, instead of being obliged only to use the special building allocated to their own individual ward or district. Leeds and Manchester have more than fifteen, Nottingham twelve, Birmingham nine, Bristol and other places seven, Lambeth and several more like boroughs six.

Branches, however, duplicate stock, and each separate building necessitates at least two assistants and a cleaning staff. Centralisation, of course, economises such charges, and committees, fearing the frittering away of their limited incomes by opening branches, close their eyes to the injustice frequently done to those ratepayers who happen to reside on the outskirts of the district or borough. In compact cities and in London the erection of many branch libraries is not so pressing as in the majority of provincial towns. Very few places require more than two or three well-equipped branch libraries, such as every town of any size ought to possess. No ratepayer should be obliged to go much more than three-quarters of a mile from his house to the public library save in exceptional instances. In London, still, there are some parts which need an enhanced number of branch libraries (more than the penny rate will stand). Eltham, where I am about to build a new library, is three miles from Woolwich, and Plumstead is $1\frac{1}{2}$ mile from the central. Many ratepayers in such cases are more than a mile from any library.

The tendency hitherto has been perhaps to attach too much importance to the value of the newspaper department. It is to be doubted, however, whether it would be at all wise to

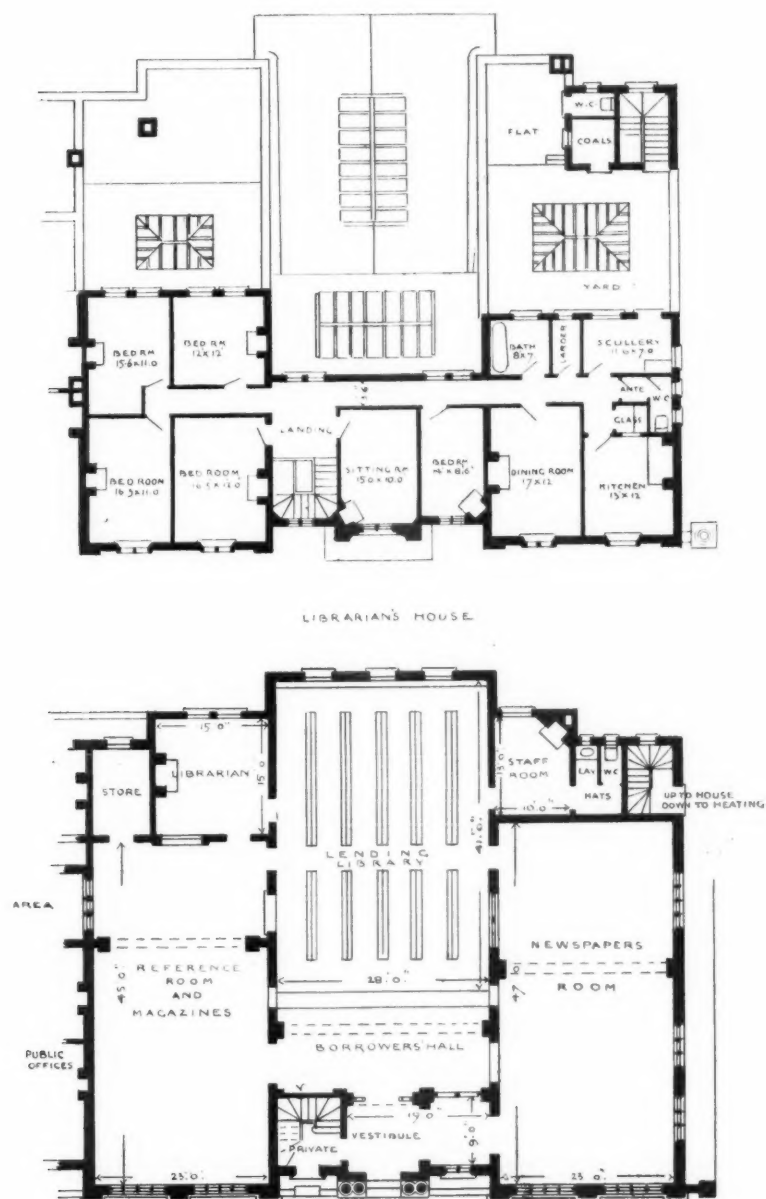


FIG. 1.—PUBLIC LIBRARY, ELTHAM, KENT. (Maurice B. Adams, Architect).

imitate the Americans in this respect, because, although provision is made for magazine reading-rooms, they seldom, if ever, provide newspaper-rooms at all in their public libraries. This has been in some degree accounted for by the paltry and unworthy character of the greater portion of the popular press in the States. The public-house in England too often is the only available attraction, and it is very desirable to provide warm and well-lighted reading rooms in competition with the tavern; but to do so successfully something better than snippity news sheets must supply the pabulum. The enormous circulation of papers full of betting paragraphs and frivolities, if not worse, which obtains among the young people who have been through the Board schools, shows more clearly than anything else the low standard of ideal so far realised. Some care has been taken to ascertain the proportion of scarcely reputable and low-class periodicals disseminated by high-class news agencies, to say nothing of the submerged publications sold in lower-class shops in back streets. It is not easy to compete with this kind of thing while so large a number of people are satisfied with such paltry allurements. We do, however, possess a highly important source of knowledge and inter-communication supplied by the technical weeklies and class or trade journals issued at popular prices unknown abroad. There is, nevertheless, a growing opinion among those who think for themselves that the far higher value of the reference room is too frequently sacrificed for the more popular reading-room, and that the reason why so few appreciate the contents of a library is simply because no effort is made to teach its intelligent use, and that the management of library affairs is conducted on inadequate lines. The first librarian of Islington, Mr. J. D. Brown, a pioneer in the advance movement, is, I am informed, recommending his committee to erect libraries without newsrooms.

The objectors to newsrooms, I find, may be thus classified. Either they are librarians employed in big libraries in rich districts, where naturally more importance is accorded to the standard library, or else they occupy positions in vast industrial centres, and so are brought into contact with the very real difficulty of the badly clad and dirty loafer who invariably infests the public reading department.

Reforms no doubt are needed to cope with this public nuisance, though to some extent it will always be more or less unavoidable. Rowton Houses—those admirable hotels for toilers—are said to encourage, if not to manufacture, loafers, the drones whom workers have to maintain.

There is one point upon which all authorities agree, and that is, if newsrooms are provided at all they must be ample: they cannot be too large, too light, or too well ventilated. Two rooms are thought desirable by the majority of librarians—one for newspapers and lighter journals and one for magazines and serious weeklies. The solid quarterlies and scientific publications are best consulted in the even quieter retirement of the reference room. For economy of administration the fewer the rooms the better, and I prefer one lofty and decidedly spacious room, such as the square and lofty reading hall which I built at St. George's-in-the-East. In that case, however, grille-protected book-cases surround the walls, so that the readers may select the books without having to consult a catalogue, the Bishop of Islington, then Chairman of the Library Committee, being of the opinion that his parishioners would far rather see the books for themselves; and the same idea is at the bottom of the growing favour accorded to the open-access principle, of which more presently. Having provided this one big apartment, I would personally prefer to put the paper slopes all round the walls, leaving the central area clear for tables on which journals and magazines should be fixed. This arrangement enables an uninterrupted view at a glance to be had over the entire room, besides which the wall slopes necessitate the high elevation of the windows; consequently no one can find excuse to loiter about merely to gaze aimlessly into the street

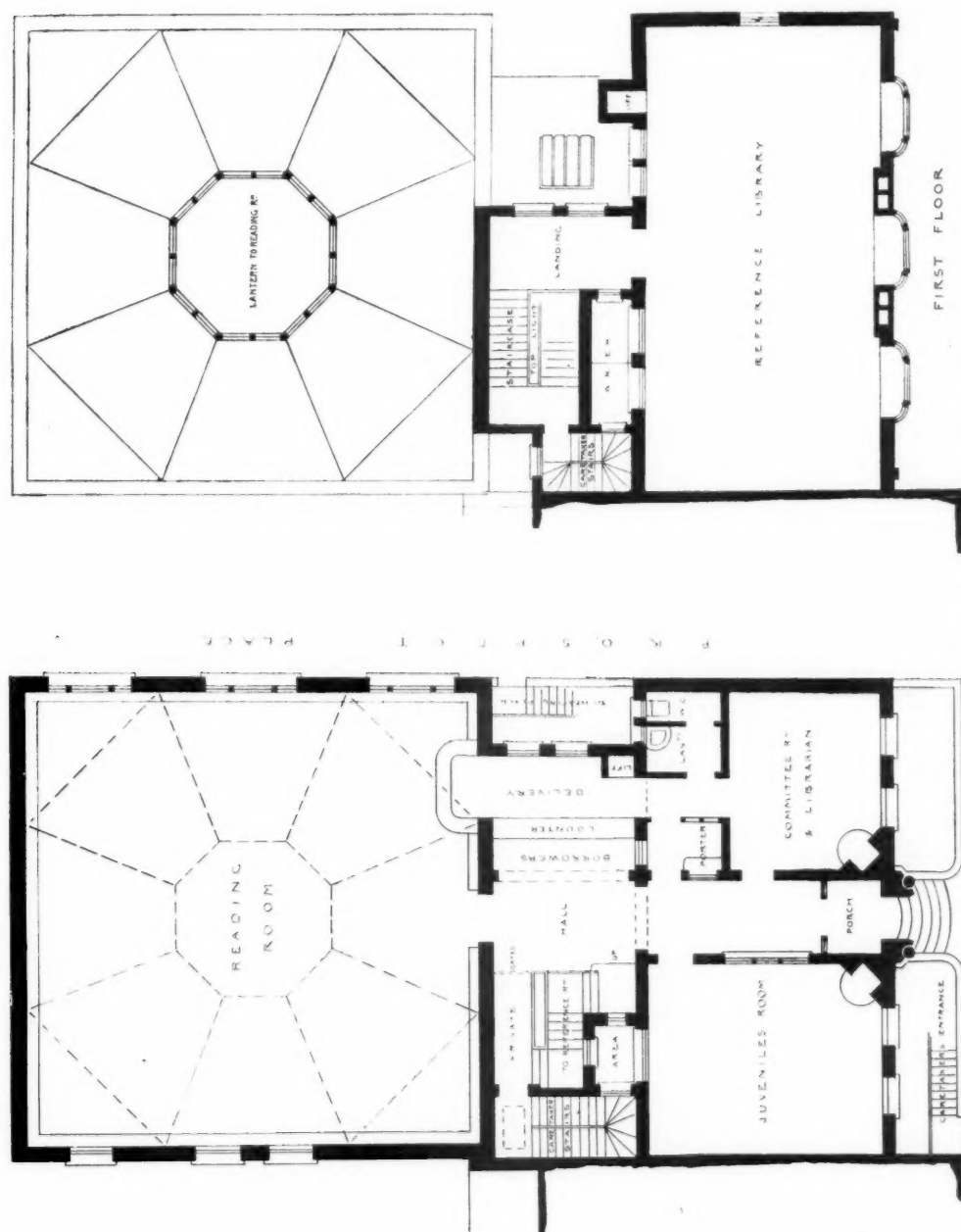


FIG. 2.—PUBLIC LIBRARY, ST. GEORGE'S-N-THE-GRAY. (Maurice B. Adams, Architect.)

and disturbingly chatter, as we often see them doing in many a library with windows in the ordinary position. Open fireplaces and radiators also encourage loafing, soil the walls, and increase dirt and dust. Every publication ought to have its own special place where it should be a fixture, so that readers may know at once if it is engaged or not. The bottom edge of the wall slope is best three feet from the floor, with a projection of one foot three inches, and the tilt of the slope should not be too sharp, or short readers will not see to read the top of the broad sheets comfortably. Two feet six inches is a good width for the height of the slope, and above that the title skirting for name tablets ranges as a capping, giving a total height of six feet. Eight feet six inches run will provide room for two big morning papers or three of the smaller ones, and, of course, the readers are best distributed by mixing daily and weekly papers together on the slopes. The illustrated journals require revolving bar clips, so as to show double-page pictures vertically, whether they are uprights or long-way prints. Every slope requires a strong brass bar in front to keep readers off the papers and prevent lounging. The brackets must be very strong and the bars very rigid, or they will get bent immediately. An iron bar for resting the reader's foot is a convenience.

Newsrooms are generally too small, indifferently ventilated, and lacking in height. The vast majority of my correspondents wisely make a point of the great advantage of keeping all the library rooms on the ground floor with top lights, and I notice that outside blinds are advocated by some. I fancy their advocates overlooked how soiled and rotten such blinds must speedily become. Vertical dormers are kept weather-tight better, and are less liable to noise from rain; they are warmer also in winter and cooler in summer than roof lights, unless second ranges of ceiling lights are introduced below, and these soon get dusty. A larger site is necessitated by a one-floor library, but the initial cost is generally repaid by economy of administration. A porter in large libraries is generally employed to supervise the newspaper reading-rooms, and in such libraries the reference department or even the lending library may, if necessary, be located on the first floor, or, as Mr. Henry Bond, of Woolwich, suggests, the magazine-room might go upstairs, because, as he points out, in many libraries the number of visitors to the lending department is four times as many as to the magazine-room, though this, of course, depends, to a large extent, on the nature of the publications kept in the magazine-room.* A library with most of its weeklies as well as monthlies in the magazine-room would have almost as many visitors to that room as the lending department.

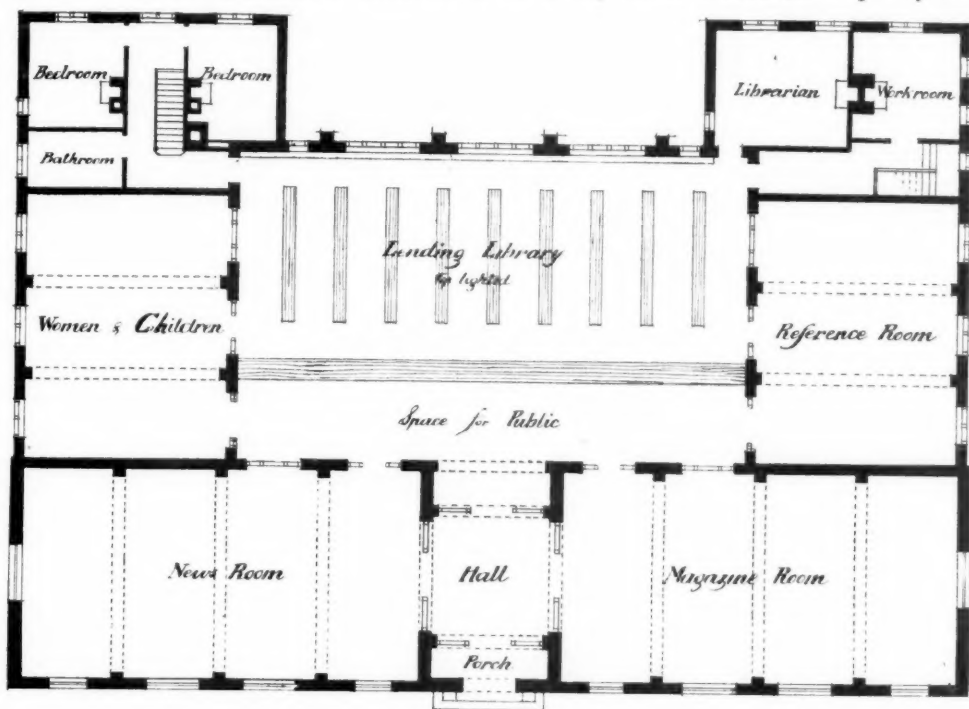
Every 25,000 to 30,000 inhabitants ought to be provided with a branch library, and, in settling the size of such buildings, it is clear that when the population is compactly housed a 10,000-volume library permits of a much better distribution of books than two libraries of 5,000 volumes each, and besides one larger building ensures a more perfect selection of books without duplicating.

This conclusion leads up to the crucial question. How ought such a library to be judged? Is it only a book exchange? Should it be allowed to remain any longer a mere superimposed bulk, continually growing bigger as a sort of accumulating museum or emporium of books, or are we to make our libraries into workshops wherein the best books as figure-heads of learning and finger-posts to knowledge shall be made ready to hand as tools for educational development? In such an ideal library every reader would have access to two or three or more volumes at once, as in the British Museum. This is a far-reaching question, and at the outset, for one thing at any rate, will necessitate the weeding out of a lot of superfluous, useless stock, and a careful revise of all that is allowed to remain; it also means, instead of

* I take this opportunity of saying that I am indebted to Mr. Hy. Bond, the Hon. Sec. of the Library Association.

for reading the revise of this Paper before it went to press. and for several useful items of information also.—M. B. A.

flimsy cloth-cased books, more worthy and more durable bindings, better printing, and superior paper, giving a permanent character to the municipal library, and making it a more valuable asset. One of the pioneers of library reform, Mr. John Ballinger, of Cardiff, tells me that the average cost of public library books is 1s. 11½d., and he asks us to consider what about the value of such a library to the community.* Mind you, he knows as well as any man how to buy books in the cheapest market to the utmost advantage. His mature opinion is that if our modern selections of books are to be of any actual educational help they must



Ground Floor Plan

FIG. 3.—WAKEFIELD PUBLIC LIBRARY. (Messrs. Cox, Trimmell, & Davison, Architects.)

contain choice and beautiful books, samples of fine printing, high-class illustrations, and beautiful bindings, in order to present a more worthy standard of craftsmanship for teaching people improved ideas and workmanlike methods. To accomplish these ends, however, the public must not only have access to the books, but there must be a more intelligent and more capable system of library supervision by employing a more efficient and higher qualified staff able to give advice to inquirers and help the reader to get what he wants. At present, in the vast majority of cases, any makeshift at the lowest possible salary is employed to do what is done; and who can wonder that our libraries stop so far short of their immense possibilities? It is surely a false economy to allow starvation wages to cripple efficient administration, thereby destroying all likelihood of enthusiastic progress; for unless a library, like any other enterprise,

* In reference to the average cost of choice books sold by auction during 1904 in England, it may be of interest here

to note that the average price fetched by the 6,275 lots was £2 9s. 2d. —M. B. A.

is intelligently managed on ever-moving, up-to-date lines, it will flag and be a failure. Believe me, I have no wish unduly to estimate the enterprise displayed by the Americans, but all the same it does seem necessary to press home the importance of what they are doing. We cannot afford to ignore their endeavours, though we may lack sufficient public spirit to emulate them. In American Universities provision is made for the special technical training of

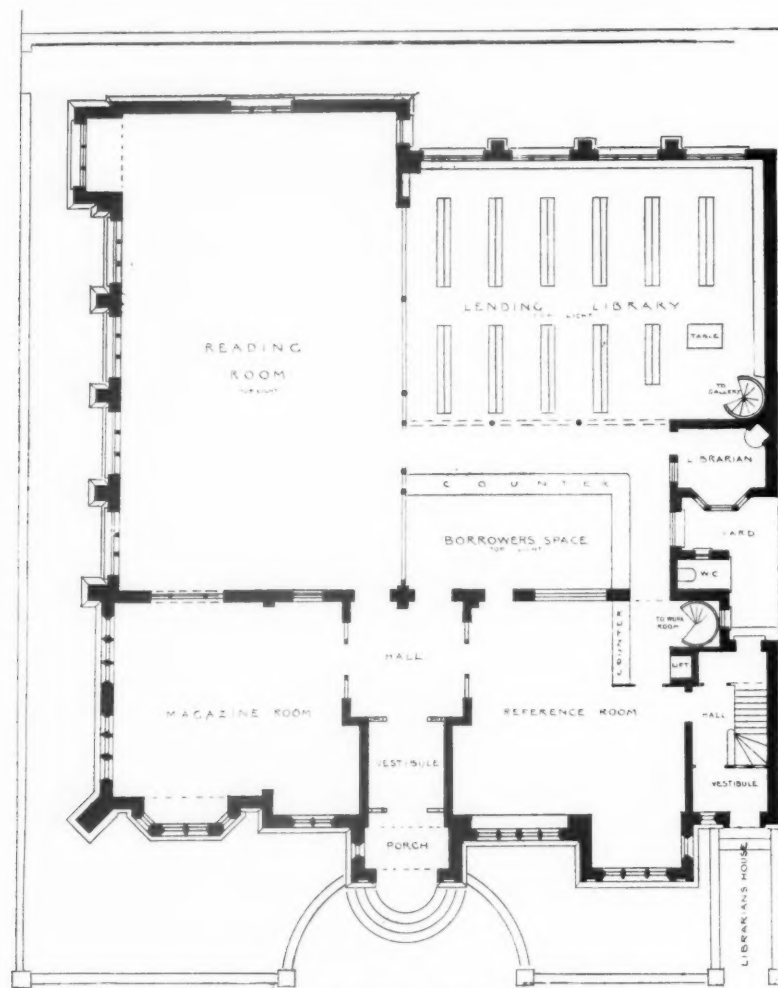


FIG. 4.—PUBLIC LIBRARY, ACTON. (Maurice B. Adams, Architect.)

librarians; consequently a highly qualified expert staff is obtained for their public libraries. They spare no pains to make their libraries beautiful, spacious, and useful. Every class is catered for, and the authorities who are responsible for their management take good care to remember the largest number of those who have to contribute to the cost of maintenance. I have alluded to the urgent need of furnishing reliable information about books and all that belongs to these public collections of ours, so that every ratepayer may be certain of

capable advice and information. In America they go further than that, and have established regular inquiry offices in some of their State or town libraries. The provision has been attended by much success. This inquiry office is located near the library entrance. Readers are not only advised about books, but they are furnished with specially prepared lists to meet individual needs. There is hardly a subject of general information upon which help is not given gratis to any citizen. He may personally seek advice, or he may communicate by telephone and get immediate replies about questions of exchange values, quotations, or references. The scheme is thoroughly encyclopædic and entirely practical, even though at first sight it may appear to us a trifle like a fad. Every taxpayer, even if he never visits the library in person,

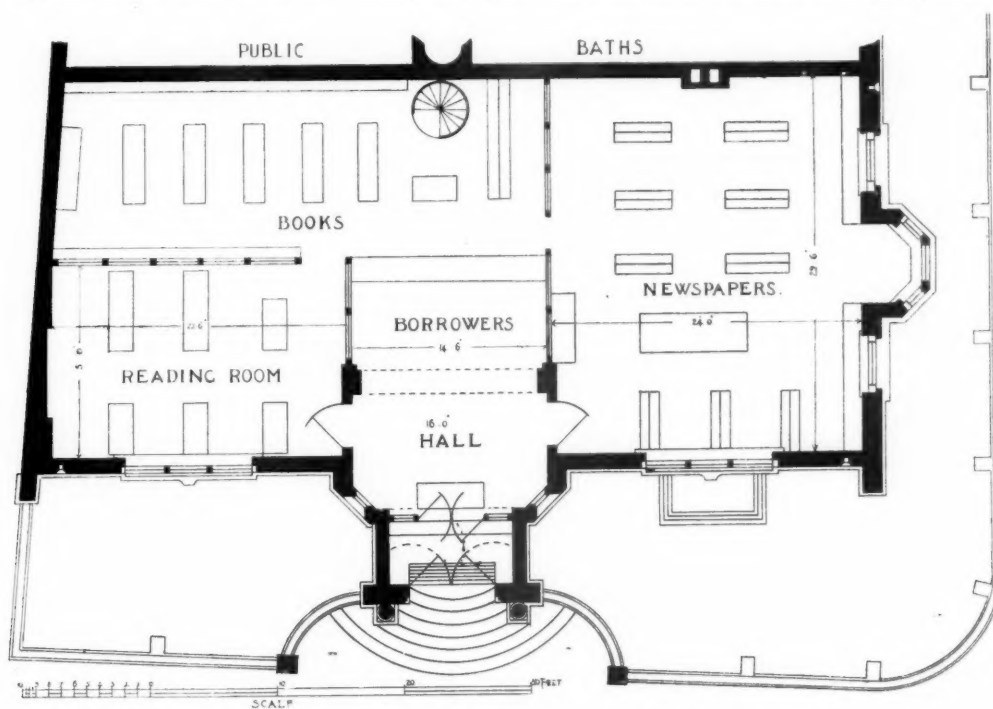


FIG. 5.—WELLS STREET LIBRARY, CAMBERWELL. (Maurice B. Adams, Architect.)

realises in America that he can have something for his money simply for the trouble of asking. And who does not want information at some time or other?

Elementary and secondary education is being provided by the community at an enormous cost in this country, with results, in spite of all shortcomings, unknown to former generations. Advantages are greater, competition is keener, luxuries are viewed as necessities, and taxation is beyond compare. The issue which we have to consider is, Are we obtaining the most valuable asset in return for the expenditure? We teach children to read till they leave school, but after that what then? Only here and there, in isolated instances, is any real effort being made on a systematic plan to bring the rising generation, after their school days, within the influence of good, healthy literature by stimulating their taste for knowledge, so as to encourage the growing capacity of youth for its acquisition and subsequent specialisation. The dominating principle, which has to be more fully realised if our people are successfully to

compete in international commerce and craftsmanship, is to emancipate our workers from the growing tendency encouraged by divided labour, which reduces them to the level of unthinking machines. We must teach the artisan to think for himself by showing him how to develop his mind. At the same time we cannot afford to ignore the importance of physique. It was Sydney Smith who sarcastically observed of a certain scholar: "That man has too little body to cover his mind; his intellect is improperly exposed." It is a great gain to know, nevertheless, what the best books have to tell, so that the world, past, present, and future, shall not present cloud and chaos to the mind, without order, system, and significance. Physical development by all means, and coupled with that no wiser or sounder investment can be conceived than the formation of school libraries and juvenile reading-rooms as part of the public library work and education curriculum of every town. In America the best positions in all libraries are accorded to the juvenile rooms. In Cardiff, at Croydon, and in Edinburgh, with perhaps a few other places, much has already been done, or is about to be done, in this direction. The enterprise is no fancy project of an amiable faddist working a craze at the cost of the overburdened ratepayer. The gradual steady increase in practical results at Cardiff shows its thorough usefulness. These few following figures are quoted from the last report of the School Board of Cardiff. During the five years since the school libraries were started in that town no less than 827,086 loans have been registered in the elementary, secondary, and higher grade schools. For 1899 the figures stood at 116,353, and for the year ending in September last the number had increased to 201,605. At the present time there are 11,306 books in circulation. To enable this system to be adopted the School Board made a grant of about sixpence annually on every child above the infants in attendance, which sum amounted to the equivalent of a rate of not quite $\frac{1}{12}$ th of a penny; but inasmuch as more than a fourth of the children of the borough are in voluntary schools, the Church schools did not come within the scope of the scheme. The initial grant was £500 for the first year, and about £335 subsequently has been paid to meet the annual cost. The School Board and the Library Committee acted conjointly. Now the whole of the elementary schools of Cardiff are included for children in and above the fourth standard, and arrangements have been systematically carried out with a proper time table. The children visit the public libraries in parties of forty, under the conduct of their teachers, to receive a definite illustrated demonstration on some special subject mutually agreed upon, and the same lecture is repeated once a week for boys and once a week for girls until the whole of the schools have been served. I give you one instance in a few words. "The History of a Book" was taken, beginning with a clay tablet from Babylon, the parchment rolls, and papyrus books of ancient Egypt, the old horn books and black letter books of the Christian era, and so on, down to the last best sample of contemporary production. The children are seated round the room in such a way that each individual sees the objects as they are handed round for inspection. Essays are written by the more advanced scholars on these various lessons, the papers subsequently being corrected in the same way as other class work by the lecturer. The whole thing is most admirable. In addition to these juvenile classes in Cardiff a series of gatherings are also held for artisans and other adults with regard to special trades and callings, when the best books available dealing with their particular subjects are exhibited and explained. In such a town as Cardiff, with a vast industrial population grouped round one dominating centre of activity, the opportunity afforded for such classification is naturally much greater than in a town, say, like Croydon, which includes South Norwood and Thornton Heath, each with its conflicting local interests, tending to cripple unified action. Three polytechnics exist where one would succeed better. But be that as it may, I see from the report of the University of London on the educational facilities of the borough, just published, that the Council has given a grant

(out of the whisky money, I understand) of £300 for some years for the purchase of technical books for the public libraries of the town, and special lists are posted up at the polytechnics for the information of the students. If that scheme can be carried out in Croydon, where out of a population of less than 134,000 inhabitants there is only one trade largely represented, viz. the building trade, with its 7,000 members, it is quite clear that many towns in the

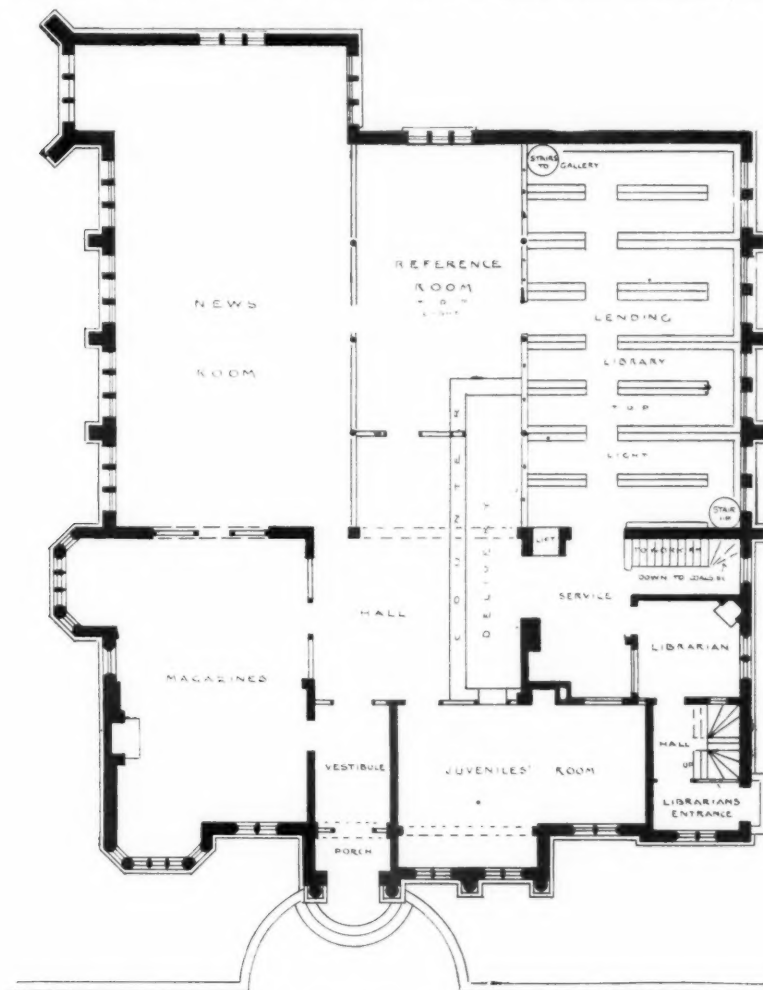


FIG. 6.—PUBLIC LIBRARY, HAMMERSMITH. (Maurice B. Adams, Architect.)

North and in the Midlands could well follow such an example. Indeed, I have the same authority for saying that the public library work at Croydon is a model of what a library should be, and that mainly owing to the great enterprise and organising capacity of the chief librarian, Mr. Stanley Jast, who originated the method of distribution by telephone and tram-car already mentioned. A highly successful scheme of "Library Talks" has for some years been held in the lecture-room attached to his central library, and brief reading lists on the

subjects of these "talks" are issued with the programme of each series. Each "talk" is illustrated by books in the adjoining library, and some also by electric-lantern demonstrations. The lantern belongs conjointly to the local branch of the University Extension Association and the Borough Library Committee. "Some of the ancient Churches of Surrey," for example, formed the subject for the talk held on 1st December. The speakers on these occasions are by no means confined to the library managers, and the whole thing is co-operative.

To provide for such occasions it is clear that a lecture room is needed as part of the library building, and undoubtedly a room of that sort would in many other ways be a great advantage. It should by preference be contrived on the ground floor, to be available as an integral part of the library when not in use for meetings or examinations. Its exit, at any rate, should be contrived clear of the usual business of the library, and an emergency door might well be located in the general porch or vestibule, as separated external doors impair supervision and are a mistake. Few libraries can now afford to do without a lecture room of this character.

We now come to the initial question in the planning of a public library as to the respective proportion of space which should be allowed to the different departments in allocating the available superficial area. Concentration of administrative area is of the first consequence, and long passages and perambulating corridors cost money and must be avoided. A roomy and even spacious entrance hall or vestibule whence all the departments may be seen of course is essential.

The open-access principle for the lending library, which was introduced into this country by Mr. J. D. Brown, necessitates at least half as much again floor area as when the closed or indicator system is employed. The space between the book-stacks in an open access library should be nearly twice the width needed by the staff, and the shelving ought not to be more than 6 ft. 6 in. high, while the lower shelves should not be so close down to the floor. There is not the slightest need to still further augment the cost of this department by radiating the book-stacks with the fallacious idea of gaining efficient supervision. Plans drawn that way look exceedingly attractive on paper, and in a competition are almost sure to take with an architect assessor, particularly if he happens to have never built a public library. The idea, of course, is that the issue clerks at the wicket counter can see all along each alley, and supervise all that is going on; but in reality that is not so: one or two persons standing at the narrower end of the aisle quite block up the prospect, and, besides, some assistants are ever on the move about the room, while the counter clerks have their attention occupied in working the register cards and superintending the returns and issues. You have only to look at a radiating plan to see how it wastes floor space, and in all my correspondence and experience I have not met one librarian, or seen a librarian's model plan, in which radiating book-stacks are shown or advocated. At any rate the radiating principle is only economically adapted to a library where the curve can be made a decidedly wide one to allow of intermediate short-length stacks, as at Kettering, the plan of which is here given.

Before tabulating the dimensions which may be quoted for the allocation of superficial areas in a library, it may be well to direct your notice to the advantage of having a double wicket or turnstile arrangement in the larger sized libraries planned on the open-access method in order that on busy days two streams of borrowers may be going and two streams coming out at the same time; otherwise people are kept waiting, and a large lobby is needed to accommodate an impatient crowd of ratepayers. The wicket gates must have an indication ticket on those occasions, showing that borrowers with names commencing with the letters A to K enter by one gate and those with L to Z go in by the other. The same at the exits. In the ordinary way one pair of gates only are required of course. Although the open-access

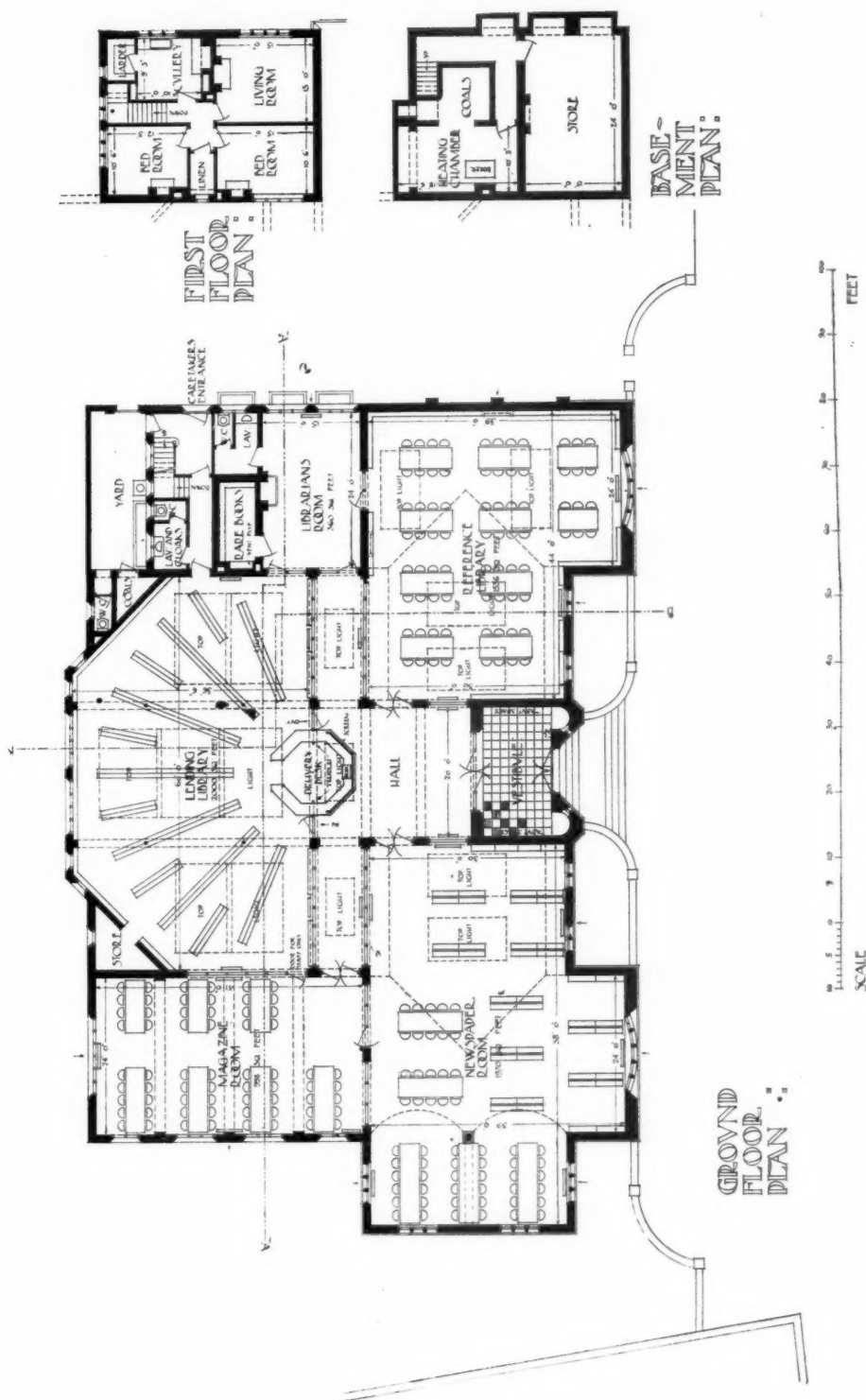


FIG. 7.—KETTERING PUBLIC LIBRARY. (Messrs. Goddard & Co., Architects.)

plan is the most expensive both to administer and to erect, it is far preferable, necessitating a more complete classification, and opening up the library to the reader in a way unknown to the closed system. The card catalogue alone when well done is a revelation, and the difficulty of displacement in practice has proved very small, each assistant having his own sections of the library to look after and be answerable for, so that in a few moments almost any book can be found.

The following figures may be useful as a comparison. A room 40 feet by 30 feet, with shelvings 7 ft. 6 in. high, will take 24,000 on the closed or indicator principle, including the counter and borrowers' public space.

A room 52 feet by 35 feet on the open-access principle, with shelvings 8 feet high (which is too high), will accommodate 25,000 volumes.

According to the usually accepted régime in proportioning the floor area for a library with a closed lending department the following allocation of space for every 10,000 feet superficial has been recommended—viz. 3,000 square feet for newspapers, 2,000 square feet for magazines, 2,000 square feet for the reference department, leaving 3,000 square feet for the lending library. Or to put the case in another way, the newsroom may take $\frac{3}{10}$ ths, the lending library $\frac{2}{10}$ ths. The reference room and its book-store, including space also for reading the heavier magazines, $\frac{2}{10}$ ths, leaving $\frac{3}{10}$ ths for juveniles and $\frac{2}{10}$ ths for the staff. Another authority gives $\frac{3}{10}$ ths for the newsroom and reference library, with $\frac{1}{10}$ th for the magazine room and lending department. The idea of proportions furnished from Bradford gives $\frac{3}{10}$ ths to the newsroom, $\frac{1}{10}$ th to magazines, $\frac{2}{10}$ ths to reference room and stock, leaving $\frac{3}{10}$ ths for the lending department. If the development of the idea of making a library building assume the form of an undivided large interior were to be adopted, any such preconceived ideas as these as to the allocation of space to the various departments would be unnecessary, and I am not sure that the principle such as I adopted, as before mentioned, is not, after all, the right one. While the present system of separate rooms is continued, these proportions just given will probably be found useful.

The position of the librarian's room is one upon which opinions differ very much. The majority of my correspondents think that the librarian should be so placed that he may supervise the whole business. I think he ought always to be next to the reference room, and close to the lending library. Only in large establishments is it at all necessary that the librarian should have a retired spacious office for clerical work. He wants to be close at hand, but not too much in evidence. Where branch libraries are worked under the chief librarian's administration scheme at the head central, no office at all is required for the librarian in charge of the branch stations; but in every library a small room for the staff is always necessary. Nowhere ought the librarian to be stuck in a glass case like a cashier's box, treating him as if he were a species of superior type of policeman.

No room for the library committee is wanted in the majority of library buildings, because these meetings are mostly held at the municipal buildings. It is very nice, of course, to have such a room if funds will allow, and the librarian will be glad of such a spare room. The available money, in nine cases out of ten, is so inadequate that it is wiser to spend it all on the public rooms. In a library of over twenty thousand volumes I should, however, consider that the librarian ought to have a private room to see interviewers and receive callers. The supervision in such buildings devolves upon the head assistant.

I have said that more should be made of the reference library, and, indeed, there is little doubt that it ought to constitute more of a rival to the lending department. The reference room should not be reached through the newspaper room, and it should be clear of the lending library, with access to the latter by all means, but with an approach of its own—quiet if you

like, but not obscure and out of the way. Every reference room must have a liberal provision of open shelving round the walls, or arranged in well-lit alcoves. The intermediate cases can be under lock and key for the more rare and valuable books. Each student ought to have a separate table 3 feet long by 2 feet wide on the top, with a 9-inch-high divisional back board to isolate *vis-à-vis* readers from one another, and to afford space for ruler-rack and pen-holders.* At the end of every such individual table there should be a shelf within the area of the table itself for books to stand when not actually in use, so as to allow the table-top to be clear for writing, with ample room also for the volume being consulted. A range of two tables of this kind placed back to back can be arranged down the centre of the room; or, if the apartment is wide enough, two rows running longitudinally make a good arrangement, having one or two cross gangways, with a series of book alcoves on either side from end to end of the reference room, dictionaries and the like being situate in dwarf stacks in the central space of the alcoves before mentioned.

These tables are sufficiently heavy to stand firm, and they have the advantage of being readily shifted. The chairs should have rubber feet attachments to obviate noise, and it is a good plan to anchor the chairs to the floor by a cord fixed on the under side of the seat, and fastened to a sunk hook or ring in the floor.

Excellent continuous desks with every convenient appliance needed by reference-room readers are provided in the British Museum and in the Cornell University Library in America. The Cornell Library consists of a vast interior divided only by open arcades, but an amount of privacy is ensured by the detached single tables I have mentioned, and these tables appear to me most admirable contrivances for any reference room.

Radiators cause much trouble and soil the walls, as well as damage the books, if they are placed near the stacks. Central positions are best where it is possible so to arrange the radiators without encouraging loafing. In some of my public libraries I have used hot air, employing grilles in the floor areas; but, on the whole, I think hot-water pipes in sunk channels covered with gratings in the centre of the passages might be well worth a trial, as the present methods of heating are far from satisfactory.

I fear that my Paper is open to the objection from architects that so little has been said about libraries from an æsthetic point of view, whereas in that respect no opportunity should be lost for again and again insisting upon the necessity of making public libraries appropriate artistically to their purposes and their destiny, so that they may rank among

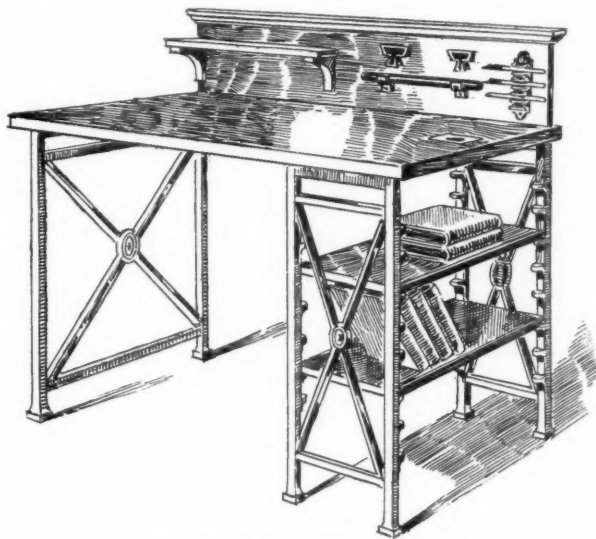


FIG. 8.—SPECIAL READING-TABLE FOR STUDENTS.

* The illustration and also that of the interior of the reading-room, Cornell University Library, U.S.A., are here given from Mr. James Duff Brown's *Manual of*

Library Economy, by permission of the publishers, Messrs. Scott, Greenwood, & Co. This book is a most useful one.—M. B. A.

the best architectural features of our modern towns. No one regrets more than I do the shocking blunders which have been made by erecting so many unsatisfactory and pretentious libraries, and I do most strenuously protest against the erecting of public buildings with public money without employing a specially qualified architect, and especially when, under the plea of saving such an architect's commission, the surveyor of the sanitary authority is allowed to prepare plans for works of this character.

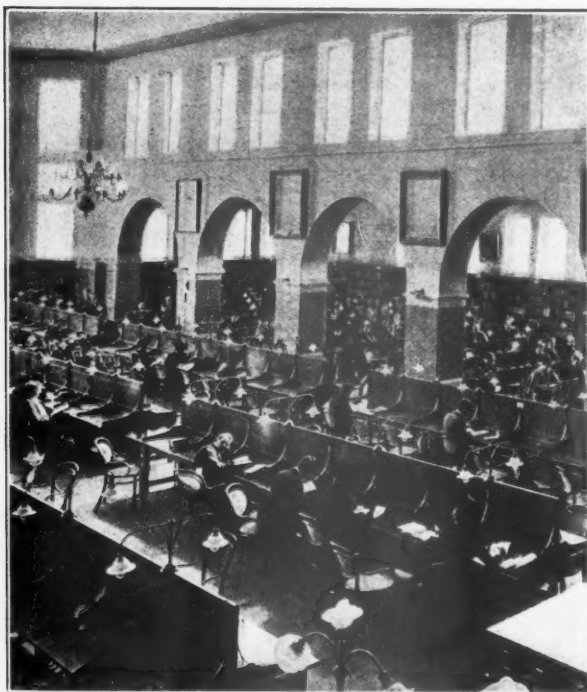


FIG. 3.—READING-TABLES, CORNELL UNIVERSITY LIBRARY, ITHACA, U.S.A.

His very training which qualifies him as a road surveyor and for the particular routine duties of his office precludes him from being able successfully or even economically to carry out architectural undertakings. The public library requires its own individual treatment, and only those who have specially studied its requirements are qualified to design such buildings. No effort should be spared to make them beautiful and befitting to their purpose, fitting caskets for enshrining jewels of knowledge. If I have not devoted so much space as I might in describing the details of library planning, it is to be hoped that you will excuse me, my purpose being, as I said at the outset, to induce a wider and more comprehensive consideration of the matter. We cannot remain content with an insular position, as if library provision could continue a merely local affair. National education is imperial in its far-reaching consequences. England no longer remains the workshop of the world. Facilities of

transport, vast colonial acquisitions, and extended powers of reciprocity in intercommunication have changed all such limited notions, while hitherto untried fields for enterprise, energy, and talent are opening up in all directions where the survival of the fittest alone is to be expected unaided by the leading-strings of privilege and class. The opportunity is now afforded, and the change is made inevitable; but it remains to be decided whether we shall rise to the occasion or not.

